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Rubber’s Reach: Chinese land investments and state territorialization in the Sino-Lao borderlands

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By

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Abstract

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Rubber's Reach is a grounded, transnational study of China's global economic integration through a focus on rubber expansion in the Sino-Lao borderlands. I examine how, as rubber reaches from China over the Lao border, the political, economic, and social processes engaged in the production of this crop translate consistently in some ways and are transformed in others. I argue that rubber has extended the territorial reach of both the Chinese and Lao states, serving as a tool for state territorialization in each country, but in different ways. This has fueled seemingly similar and totalizing constructions of rubber as a strategic resource and a means of advancing rural development and the integration of the remote borderlands of both countries. These narratives elide divergent ecological, political, and economic conditions between Yunnan and northern Laos, which have shaped rubber's territorializing effects in each country.

I demonstrate the ways in which actors and agencies at various levels of the Chinese state have understood rubber as a strategic national resource, and as critical to furthering development and political stability in China's Yunnan Province. I then show that this characterization followed rubber across the border where both the Lao state and Chinese rubber investors draw on the crop's history in China to envision and construct its future in Laos. Other aspects of Chinese rubber production, such as state protections for domestic rubber producers and an emphasis on large-scale plantation modes of production, have not directly translated into the Lao context. Instead, Chinese investors encountered fragmented, decentralized land governance practices in Laos and contrasting ways that rubber is important to state territorial projects. These decentralized land governance practices have created more obstacles than opportunities for Chinese investors, while also creating openings for local state authorities and Lao rubber farmers to take advantage of Chinese capital in unexpected ways.

By tracing the changing relationship between Chinese capital and the state, examined through the grounded experiences of rubber investors as they move beyond the country's borders, I demonstrate the micro-processes by which China's global integration is taking place. I find that the multiple ways that the Chinese state continues to treat rubber as strategic and support its production and expansion as such have influenced Chinese companies' decision-making in Laos. At the same time, the ability of companies

to derive benefits from that support once they move beyond the border becomes limited in important ways, and once they are forced to also navigate a new set of interests. I conclude that the Chinese state-capital relationship shifts as Chinese investors enter a new country context and must contend with the multiple, sometimes conflicting demands of regional and national Lao state land authorities and with layered local histories of land management and agricultural production.

As the world is reshaped by China's rise, I find particular value in a focus on the grounded engagements, the micro-processes, and intimate interactions between Chinese investors and the people and places they encounter beyond the border. My findings, explored through a political ecology lens in the seven chapters of this dissertation, enhance critical social science understandings of how foreign investors encounter land politics and reshape development practices, specifically in post-socialist countries of Asia. They also speak to the ways the material practices, political discourses, and economic logics of iconic resources like rubber are both inseparable from each other and become transplanted and embedded into new spaces and societies.

This work is dedicated to my Nainai, Wu ShiKui,
who passed before its completion but inspired its beginning.

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Acronyms

CCP	Chinese Communist Party
DAFO	District of Agriculture and Forestry
KMT	KuoMinTang (or GuoMinDang, The Nationalist Party)
LFAP	Land and Forest Allocation Program
MAF	Ministry of Agriculture and Forestry
NLMA	National Land Management Authority
ORP	Opium Replacement Program
PRC	People’s Republic of China
SOE	State-owned enterprise
TLIC	Turning Land into Capital
YSF	Yunnan State Farms

Units

ha	Hectare
Lak	Lao Kip ($1USD = 8,700 lak)
masl	meters above sea level
Mu (亩)	1 mu = 15 ha (primary unit of land used in China)
rmb or yuan	Renminbi (national currency of the PRC)

Acknowledgements

This work began long before I arrived in Berkeley in 2013. The stories and ideas contained in the following pages grew from seeds planted in noodle shops in Kunming and Vientiane, where the questions I decided to pursue first began to puzzle and engage me in long dinner conversations with friends and colleagues. They began in my Nainai's living room in Guangzhou where, not realizing, I tried out early hypotheses of how Chinese capital is changing and being changed by its integration into landscapes in Laos on her and my Uncle Jim over steamed fish and bowls of *zhou*. Developing this project has therefore always felt like a collaborative endeavor, and while the mistakes and weaknesses in the work are mine alone, the insights and findings were achieved only with help from the following people.

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Kyophilavong has been a wonderful friend and has supported my work both through formal research permissions and long conversations about the Lao economy and business environment. Mayvong (Panoi) Sayatham has helped me greatly as a constant friend, a wildly adventurous field work and travel partner, and a committed and skilled translator. Finally, the R4D research team, especially Professors Thoumthone Vongvisouk, Daovorn Thongphanh, and Phokham Latthachack were a fiercely dedicated and ever entertaining set of field work companions.

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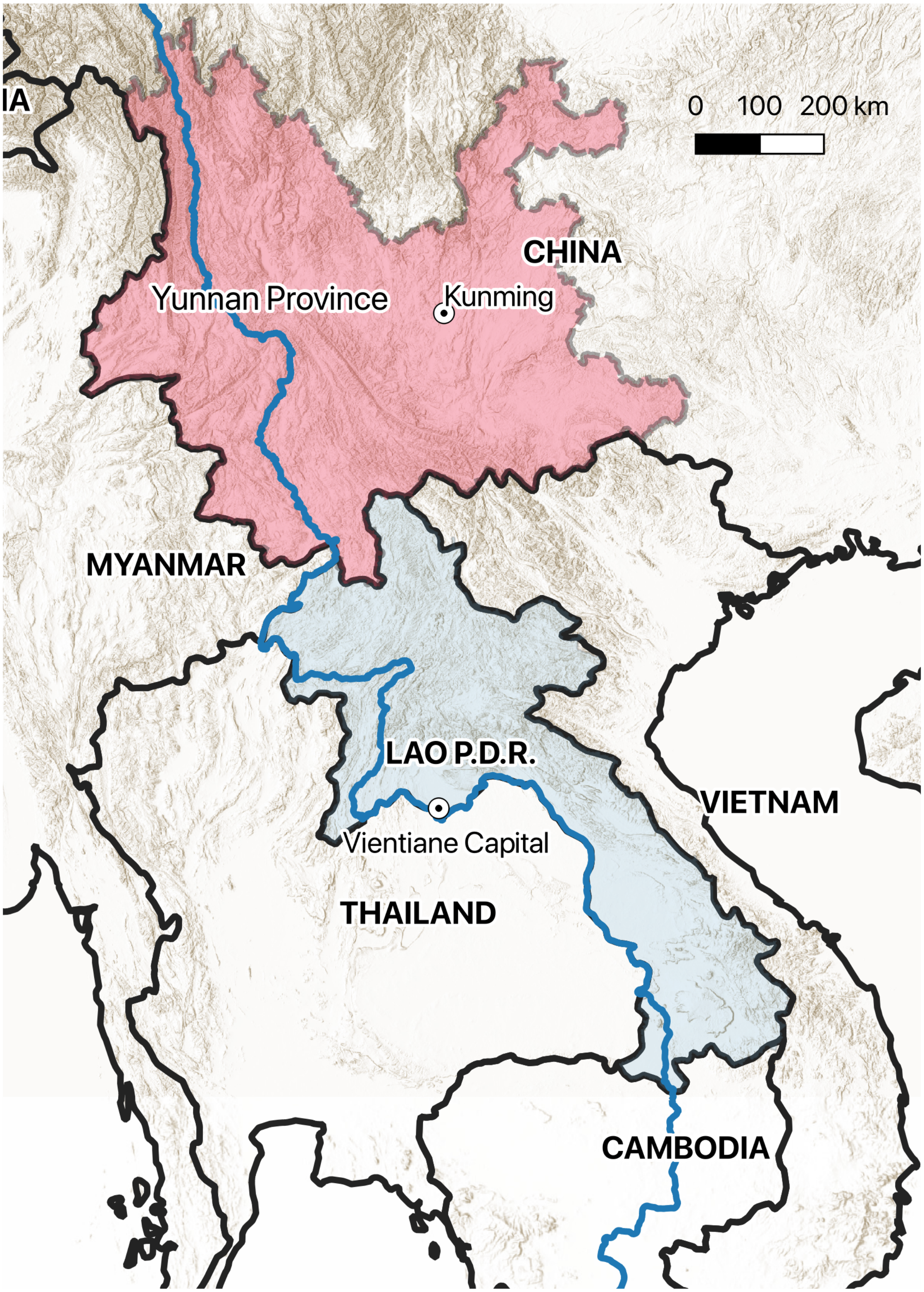

Figure 1. Map of Study Region: Yunnan Province, China and Laos

1 Introduction

I first met Mr. Wen in March 2017 in the quiet provincial capital of Luang Namtha in northern Laos.[1] I found the front door of the small rented home he had converted into a company office ajar and, after introducing myself in Mandarin, Mr. Wen invited me in. We sipped steaming tea under the light buzz of a ceiling fan as he explained how he went from being the son of rubber tappers in China to establishing his own rubber plantation in Laos with the help of his son. For three generations now, the lives of the Wen family have been intertwined with the development of China's rubber sector and, most recently, its spread deeper into Laos. The structure of the rubber sector has changed considerably since the crop was first established throughout the hills of southern Yunnan in the 1950s. The Wen family has adapted to this change, maintaining their role as stewards of the spread of rubber. In this role, Mr. Wen explained to me, each generation has seen their work as not simply a livelihood but also a contribution to ideals of economic development and political progress as envisioned and supported by the Chinese state.

Mr. Wen's parents migrated in the 1960s from Hunan Province to Xishuangbanna, the southern region of Yunnan bordering Laos and Myanmar, to tap rubber. They answered then Chairman Mao Zedong's call to secure southern China's border. They expected their lives to be better on the Yunnan State Farms than they had been on their family plots in Hunan. Yunnan State Farms was (and remains) state-run – a former border military unit transformed after the country's establishment (in 1949) into an agricultural unit charged with claiming uncultivated land for the state and with frontier infrastructure construction and settlement (Woodward, 1982). In Southern Yunnan, this work involved the transformation of upland forests and swidden agricultural systems into rubber plantations to supply eastern China's military and industrial sectors. While forests and swidden systems had fed local communities, they did not generate state revenue or contribute to state distribution systems. Han Chinese[2] migrants like Mr. Wen's parents are often portrayed by the state and remembered by their children as heroic pioneers who helped to establish political order through their labor and loyalty to the Communist Party. They paved the way, the story goes, for progress and development in the remote peripheries of the then newly established People's Republic of China.

Mr. Wen grew up on the State Farms commune tapping rubber with his parents, but by the time he was 30 with a young son he began to envision a future for his family beyond the State Farms system. China's economy was opening, Yunnan was shedding its role as a remote periphery and becoming a hub for cross-border trade, and the steady incomes and benefits provided to state workers like him and his parents were being dramatically outpaced by the rise of other types of economic opportunities emerging in the private sector. He knew State Farms technicians who travelled to Laos on study tours, and others still who presented rubber and cash crop workshops there as part of a set of development cooperation initiatives between the Yunnan Provincial Government and

[1] Throughout the dissertation, pseudonyms will be used for all individuals and companies. Persons very closely familiar with the rubber sector in northern Laos may be able to decipher companies but identifying individual interlocutors will not be possible.
[2] Han is the dominant ethnicity in China, representing roughly 93% of the country's population.

provinces in northern Laos. Thus, instead of remaining on the State Farms commune with his parents, Mr. Wen scraped together enough to strike out across the border in 1992. He and his wife reasoned that there would be far more opportunities in Laos, a country he described as "just like ours 30 years ago. Now China is all highways and concrete homes, but here [in Laos] they still have dirt floors and grass huts. They need our help" (Interview, Luang Namtha, March 2017).

Mr. Wen first established a modest enterprise importing rice fertilizer and maize seeds from China and selling them to Lao farmers, but in the early 2000s he decided to turn back to rubber. The Lao state had just loosened restrictions on foreign investment in land under a new state initiative to 'turn land into capital.'[3] The Chinese state had also begun to provide subsidies and other support to Chinese agribusiness enterprises willing to establish agricultural investments in the borderlands of northern Laos and Myanmar as a way of providing livelihood alternatives to opium. This support was formalized in 2004 under the Opium Replacement Program and, sensing a business opportunity, Mr. Wen secured a 20 ha tract of land to establish a rubber seedling nursery and small plantation in Luang Namtha Province. He planted a few hundred hectares more through contract farming agreements with nearby villages, and also established the Hunnan Business Association of Luang Namtha to facilitate transactions for other Chinese investors seeking economic opportunities in Laos, as he once had.

A few months after meeting Mr. Wen, I met his youngest son, Wenli, at a workshop on responsible agribusiness investments in Vientiane, the capital of Laos. A rough but jolly guy in his late-20s, Wenli clearly stood out from the rest of the crowd. He was the only Chinese agribusiness investor among a few other private sector representatives in attendance. The rest of the roughly 200 attendees consisted primarily of Lao state officials and international development workers. Wenli spoke excellent Lao and jovially shook the hands of the many Lao state officials he already knew by name. His father had sent him to the National University of Laos for his bachelor's degree, where he learned to speak Lao and navigate the country's political and legal structures as needed for the family company to operate. He boasted that these were skills that earlier generations like his father lacked, but that Chinese entrepreneurs like him had to cultivate if they wanted to succeed in doing business in other countries. These skills served him well in a range of contexts, from negotiating with state officials for transport and customs permits to representing the company at holiday and wedding celebrations in villages near its plantation plots in Luang Namtha.

When I asked Wenli for his impression of the workshop, he shrugged. I knew that the workshop organizers from a prominent international development organization hoped to encourage investors like him to engage more with civil society organizations and to commit to certain environmental and social responsibility standards. He acknowledged that the workshop was a good excuse for him to come to Vientiane and build relationships with Lao state officials. But instead of committing to improved standards of operating, Wenli expected other attendees to see how much his and other Chinese rubber

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[3] "Turning Land into Capital" (TLIC) became a widely used slogan in Laos in the early 2000s, when the Government of Laos began to encourage foreign investment in land as a way of generating state revenues and infrastructural improvements.

companies were contributing to development in Laos. "My family's company is just a small private company, but we still represent China … we bring rubber to Laos not just for us but to help the Lao people develop, as our country developed" (Interview, Vientiane, November 2017).

The Wen family history reflects the deliberate stitching together of production systems, economic structures, and state development logics around rubber as cultivation of the crop stretches beyond the Chinese peripheral provinces into Laos. Each of the three generations of the Wen family has participated in a different phase in the development of China's rubber sector as it changed from a state-supported domestic operation run by Yunnan State Farms to a market-driven transnational network of producers, processors, and traders. They represent themselves as both pioneering entrepreneurs and agents of state-led development in both Yunnan and Laos, and they depict rubber as a lucrative cash crop and also a pathway to progress. As such, the Chinese rubber investors (on whose experiences this dissertation focuses) provide an important perspective on the connections and contradictions between market and state drivers of the expansion of rubber beyond the country's borders. Their stories also speak to a larger pattern playing out across the world today: that of China's transition to an open market economy and its growing influence on agricultural production and economic development in other parts of the world.

In this dissertation, I present a situated, critical history (Peluso 2012) of rubber production and trade in the borderlands of Yunnan and Laos. I track this iconic product as it 'travels' from China's national hinterlands in Yunnan to Laos – simultaneously extending the reach of both Chinese and Lao state territorial control in often slippery and contradictory ways. In doing so, I demonstrate how rubber shifts from a strategic resource[4] responsible for driving internal Chinese state formation, to a mechanism of Chinese economic integration into new spaces and a tool of Laos state territorialization.[5] I examine which characteristics of Chinese rubber production are transplanted into Laos and which are left behind or transformed as they cross the border. I focus on the relationships between different actors – particularly between the variety of rubber producers and the equally diverse state institutions in both countries – and show that these relationships remain formative in both countries yet are also reconfigured and renegotiated as rubber is transplanted into new contexts. Within this story, rubber does material and cultural work as a product and symbol of the once inward-looking Chinese nation's outward expansion through investment and development cooperation.

I begin by considering the long history of rubber as a strategic resource and an instrument of state territorial control in China. I pay particular attention to how the Chinese state's interest and resultant involvement in domestic rubber production extends and changes as Chinese investors bring rubber into Laos. I document shifts in the Chinese state-capital relationship – in this case, the relationship between Chinese rubber investors (Chinese capital) and various state institutions in Yunnan and Beijing – at a moment of

[4] A strategic resource in China is one for which access to a reliable supply is considered a matter of national security (explored in depth in Chapter 2).
[5] State territorialization, as defined by Vandergeest and Peluso (1995), is a specific mode of territory making in which the state claims control over people, resources, and space, "excluding or including people within particular geographic boundaries" and "controlling what people do and their access to natural resources within those boundaries" (p. 388).

major transformation. As Chinese enterprises move beyond the country's borders into new country contexts, they move beyond the jurisdiction of the Chinese state and yet they are still influenced by state discourses and policy instruments in many ways. I understand this state-capital relationship through analyses of official discourses, the design and implementation of policy interventions, and the decision-making and narratives used by Chinese investors I encountered as they conducted business on the ground in China and Laos. In doing so, I contribute to the literature on the specificities and divergences of China's global integration (Klinger & Muldavin, 2019), which examines the country's growing engagements in development and investment activities across the world as a matter of reflexive and contingent integration rather than a unilateral assertion.

On the other side of the border, the rubber boom has exposed the contradictions between the Lao state's ongoing efforts to consolidate and centralize state power, drive development, and build its governing capacity, and its reliance on foreign aid and investment to do so. Proponents of rubber in Laos have framed it as a silver bullet for multiple development obstacles – most notably for stabilizing shifting cultivation and eradicating opium cultivation – and its establishment has therefore been supported by both Lao and Chinese state development initiatives. As Chinese investors moved into Laos and began to seek land, however, it became clear that state institutions across administrative levels and between the two countries had contrasting preferences as to how rubber was promoted in Laos. Chinese actors promoted a corporate plantation model of rubber production whereas different interests within the Lao state disagreed over how, where, and under what production arrangements rubber should be produced in Laos. As such, Chinese rubber investors have had to balance Chinese state interests in rubber with multiple, shifting, and often contradictory Lao state priorities and resultant regulations, all while pursuing their own business interests amidst market volatility. Insights from investors' perspectives into this process of negotiating and balancing these various kinds of competing interests allows me to draw important insights into understandings of the global land grabs phenomenon and the role transnational capital plays in ongoing processes of state territorialization.

In considering the history of the Wen family, I aim to shed light on the lived experiences of the actors driving rubber sector development and how those experiences – linked as they are both to practices on the ground and to political discourses around land access and development – are transplanted from their origins in China to new contexts in Laos. In this dissertation, I argue that despite a seemingly universal and totalizing construction of rubber as a strategic resource by the Chinese state, the divergent ecological, political, and economic conditions between Yunnan and northern Laos has shaped this same state support toward different outcomes for the rubber sector in each country. Through this case, I show that the machinations of foreign capital and state territorialization are clearly inseparable, and yet their entanglements are always mediated by the particular material and cultural significance of rubber and the land on which it is being grown. My comparative analysis of systems of rubber production across Yunnan and Laos demonstrates that investigations of state territorialization and land-use change must move beyond fixed and unified notions of "foreign capital" and "land grabbing." Doing so reveals the contextual contingencies and specificities in how rubber is made and what interests it serves for the state, investors, growers, and communities converging in this transnational sector. As such, this dissertation reveals how the relationships between

Chinese rubber firms, Lao rubber farmers and laborers, and the Chinese and Lao states are constantly being re-negotiated through changing market conditions, shifts in political conditions and state regulatory structures, and the experiences and knowledge gained from personal encounters between these actors on the ground. The findings presented in the following chapters also reflect the inevitable changes in the relationship between the Chinese state and capital as firms invest beyond the country's borders.

1.1 Rubber, Territory, and Chinese Land Grabs

Foundational to this dissertation is an interrelated set of considerations around how rubber has moved across the China-Laos border. These considerations are rooted in the processes of state territorialization in the context of transnational land investment and how these intersect with the material, economic, and political characteristics of rubber. When the world first became focused on the global rise in large-scale transnational land acquisitions, the territorial implications of these 'land grabs' came strikingly into view. On one hand, these acquisitions, largely undertaken to establish intensive agricultural production and resource extraction schemes, were not new (White et al. 2012). Generations of Marxian geographers have theorized and documented capital's ongoing search for new frontiers of accumulation and the commodification of land foundational to this ongoing cycle. What was new and particularly concerning to the organizations and researchers who framed the phenomenon emerging in the late 2000s as a 'global land grab' were the scale of land being acquired and the rise of a new set of investors – namely, emerging market economies led by China (Anseeuw et al. 2012; GRAIN, 2008).

These land grabs were interpreted by some as threats, not only to the communities directly dispossessed by them but to the fabric of national territorial sovereignty in countries where acquisitions occurred. They were described as the foreignization or denationalization of land (Zoomers, 2010), a symptom of the gradual disassembling of national territory through which non-national systems of authority were replacing the primacy of national sovereign territory as the foundation of state power (Sassen, 2013). Countries like Laos, often depicted as having weak preexisting land governance regime, were described as disproportionately targeted by investors intent on taking advantage of their lax controls on land (Deininger et al. 2011). In more dramatic media representations, Dwyer (2011a) sums up the dominant narrative at the time as, "corrupt third world governments sell off resources to 'foreign investors with deep pockets' and are resisted by local peasants" (p. 4).

Others have interpreted these land deals through the lens of host country state territorialization – an interpretation that has become the dominant read on foreign land investments in Laos. Thus, instead of threats to state sovereignty, many have suggested that transnational land investments in Laos have been used by state authorities to extend their territorial control (Diana, 2009; Dwyer, 2011b, 2013; Tan, 2015). Through examining the history of the Thai government's administration of land and forest rights, Vandergeest and Peluso (1995) depart from earlier studies of territoriality as an externally focused process and instead examine state territorialization as an internal process. Whereas the creation of territory was more often assessed in terms of establishing international boundaries, political identity formation, and the defense of national territory against outside incursions and threats, they built upon Sack's emphasis on "delimiting and asserting control over a geographic area" (Vandergeest & Peluso, 1995, p. 388). Their work directed subsequent scholars to examine the various spatial technologies of governing and strategies of territorial control, particularly of defining the terms and conditions of resource and land access. These technologies and strategies of territorial control are strengthened by economic activities that further projects of land zoning, the commodification of land, the marketization of agricultural production, and the establishment of physical infrastructure, among other effects.

Subsequent scholarship on state territorialization has explored how, in the current neoliberal context, non-state actors often contribute to processes of state territorialization. Non-state actors from conservation organizations (Corson, 2011) to foreign development aid organizations to local elites and entrepreneurs (Korf et al. 2015) do so by helping establish mechanisms of territorial control and reinforcing the state's claim to authority over these mechanisms. Non-state actors may advance their own objectives (e.g. conservation, enclosure and commodification of land for profit, and economic development). But they ultimately are shown to do so in ways which draw upon and reinforce state categorizations of certain landscapes and help enforce their corresponding proscriptions and prescriptions as to who and how those landscapes can be accessed.

In line with this work, scholars of Lao land and resource politics have interpreted the rise in foreign land investments throughout the 2000s through the lens of state territorialization. The Lao state has long used land and agricultural reforms as policy tools for driving both economic development and the establishment of tools for expanding state governing power (Lestrelin 2011). Dwyer (2011b, 2013), Lagerqvist (2013), and Kenney-Lazar (2012, 2017) among others have read the Lao state's "turn land into capital" strategy, formalized in 2001 and credited as the watershed moment in the country's opening to foreign investments in land and shift towards a development strategy based on resource extraction and export, as a continuation of previous strategies of state territorialization. They point in particular to the wave of land titling initiatives started in the 1990s under the Land and Forest Allocation Program (LFAP) as having established the spatial logics and discursive justification for state enclosure of upland forest and swidden cultivation[6] areas (Lestrelin 2010). These titling programs set a precedent for the Lao state to enlist non-state actors, in this case the foreign aid

[6] Swidden cultivation, also referred to as shifting cultivation and (often with negative connotations) slash and burn, is an agricultural production and land management strategy practiced across Southeast Asia, Southern China, and many other tropical and sub-tropical regions of the world. In contrast to permanent agriculture which involves cultivating multiple harvests from fields repeatedly over time, swidden cultivation involves the rotation of productive fields across the landscape and the use of fallow periods during which soil nutrients recover. Clearing of fallows for renewed production is typically done by slashing any vegetation grown during the fallow (rest) period and burning it as a way of enhancing the soil carbon and nutrients, hence the term 'slash and burn'. States have attempted for over a century to discourage the practice of swidden agriculture for a range of reasons. In the 1980s, despite a lack of substantiating data, international environmental organizations also began advocating against the practice as environmentally destructive. Despite these efforts to eradicate the practice, swidden remains prevalent across Laos and many other countries in the region (see Kenney-Lazar (2013) for an overview of the state of swidden cultivation in Laos). For a summary of the environmental and political logics around those efforts and the fallacies of some of these logics, see Bruun et al. (2009), Cairns (2015), or Padoch et al. (2007).

organizations that funded and oftentimes implemented the LFAP, to extend its own territorial control (Lund, 2011).

Those same areas, newly claimed as state land, would in turn become the zones designated as available for foreign investment. In this dissertation, I therefore understand foreign investors as the most recent in a long line of non-state actors employed in Lao state territorial designs. I show that the intersection between state territorialization processes and patterns and trajectories of foreign land investments in Laos can be seen in the places selected for investment by Lao state facilitators and the justifications used. As in other cases of land grabs across the world (Alden-Wily 2012), traditional agricultural production and resource use systems like swidden plots and forests used by local communities have been devalued in Laos. They have been depicted as inefficient, primitive, and associated with opium cultivation which has constituted a central feature of upland livelihoods in Laos since the colonial era but which was outlawed in the 1990s. These forms of land use constitute the primary areas explicitly targeted for foreign land investments (Heinimann et al. 2013; Schönweger et al. 2012). Dwyer (2013), McAllister (2015), and Kenney-Lazar (2019) have also demonstrated that Lao state actors directed foreign investors to invest in places inhabited by ethnic minority communities historically resistant to state control and integration into the national economy.

In examining the role of Chinese investment in processes of Lao state territorialization, I also draw on scholarship which has further interrogated and broken apart the category of the 'state' in conceptualizations of state territorialization. In his analysis of illegal logging in Vietnam, for example, To (2015) points to considerable discrepancies between state discourses and imagery used to communicate and legitimize state authority over forest resources and regulatory enforcement in practice, which he reads as a product of discrepancies in the interests of actors at different levels of state administration. In Laos, Lund (2011), Creak and Barney (2018), myself (Lu & Schönweger 2019), and others suggest that Lao state sovereignty is fragmented, and that this has important implications for territorialization. Disconnects exist between administrative levels of the Lao state (central, provincial, district) and across ministries, making it pivotal to consider multiple actors and interests within the state in any study of land governance in Laos. Whereas Lao state actors often work in coordination towards common policies that strengthen state territorial control, they also engage in internal competitions for power, and sometimes simply lack the infrastructure or incentives to fully coordinate across regions or line ministries and between administrative levels. In order to obtain land for rubber, Chinese investors have had to navigate a complex, fragmented network of institutions and individual state leaders that oversee land investments in Laos but have their own layered, sometimes conflicting interests and objectives. This conceptualization of the Lao state helps me interpret the contradictions and inconsistencies in how Lao state actors grant and govern land investments, and to understand why Chinese companies have been granted land where they have, and why they have not in other places.

My case of Chinese rubber investments in Laos contributes to understandings of how the practices of non-state entities underwrite processes of state territorialization as they unfold on the ground. Furthermore, it is through my analysis of investors' perspectives – data all but absent in the literature – that the spatial characteristics and political implications of rubber's expansion in Laos is revealed. Moreover, because foreign investments in rubber plantations only began in the mid-2000s, most plantation trees have only recently begun to reach tapping age in the mid-2010s.[7] Existing studies therefore focus on processes of land acquisition and plantation establishment, but few address the production phase which is just beginning to have widespread impacts. As Peluso and Lund (2011) remind us, "while the 'grab' itself is important, it only marks the beginning of a process of gaining (or grabbing) access (Ribot and Peluso 2003)" (p. 669). Thus, bringing existing analyses of the Lao rubber boom forward, I look not only at how Chinese investors obtained land but how they have maintained their access to it and their ability to benefit from it (Ribot and Peluso 2003). In doing so, I also show that multiple actors within the Lao state use Chinese rubber investments to further their own territorial goals in ways which force Chinese companies to change their approach to rubber production and, in turn, to engaging the Chinese state which itself remains strategically interested in rubber. In other words, I ask what happens when the territorial designs of non-state actors do not align with those of the state? I attempt to answer this through the following chapters by examining the different interests in rubber held by Chinese and Lao state actors, as well as among different Chinese investors and Lao producers active in the sector.

1.2 The Political Ecology of Rubber and State Territorialization in the China-Laos Borderlands

This dissertation reveals the ways the particular materialities of rubber (*Hevea brasiliensis*) – more than most other agricultural commodities – have articulated with ongoing projects of state territorialization in both China and Laos and how those projects have, in turn, shaped the rubber sectors in both countries. It examines the political economy of rubber production and the materiality of rubber and the landscapes where it is cultivated as co-produced and historically contingent. Rubber is at once a globalized market commodity and political symbol deeply embedded in Chinese visions of modernity, economic development, and progress. Its function in these different roles is shaped by its material qualities, such as the length of its production cycle, the relationship between climate conditions and yield, and the physical mechanics of planting, tapping and processing. As such, my analysis illuminates why rubber is planted, where, how it is grown, and the power relations that arise between rubber producers and state and market structures. Thus, my analysis of policies and market dynamics of rubber production is couched in considerations of the unequal power relations surrounding access to land, resources, and markets in both China and Laos.

It would be difficult for most people across the world to go a day without relying on something made of rubber. Rubber has been described as "the muscles and sinews of industrial society" (Tully 2011, 17) as it is the primary raw material used to make the hoses and belts that connect and run most machines, the tires of the planes, trucks, and motorbikes that carry goods and people around the world. Although around 57% of global rubber consumed is now synthetic, natural rubber is a non-substitutable input for products needing to withstand high friction and temperatures (Fox & Castella, 2013).

[7] Appendix II shows an overview of the stages of rubber production.

This makes natural rubber essential to industrial progress, global transport systems, and military security.

Due to its importance as a raw material, Western countries included rubber in a trade embargo placed on China and the Soviet Union in retaliation for their engagement in the Korean war in 1951 (initiated and enforced by the US) on Chinese imports of rubber and other key industrial materials. The impact of this embargo was profound in many ways. It seriously threatened China's ability to import rubber tires and other supplies, which primarily went to military transport use, and to parts for industrial machinery (Cain, 1995, p. 49). This resulted in the commitment by Chinese leaders to pursuing economic self-reliance and to categorizing rubber as a strategic resource. Mao Zedong declared that the country needed its own rubber sector, that domestic military and industrial demand for the resource should be met by domestic production, as a matter of national security. The domestic rubber sector is protected and supported as strategic to this day and Chinese international investments in rubber are driven not only by economic motives – China is the top consumer of natural rubber globally, but produces only 20% of its own demand domestically – but also by the belief that such investments help secure the country's access to rubber beyond its borders.

The cultivation of rubber – particularly as a plantation crop[8] – also has transformative effects on landscapes which have carried important political weight. Certain aspects of rubber cultivation have articulated in particularly powerful ways with ongoing projects of state territorialization in both China and Laos and are thus worth reviewing here. Rubber has a 25-40 year production cycle, which lends the crop and the spaces where it is cultivated a sense of permanence and can serve to cement certain forms of property and claims in place. Small farmers use rubber not only as a lucrative cash crop but to stake claims to land, while states and plantation enterprises have read into its permanence the effect of legibility (Scott 1998). Due to the long production cycle of rubber, the crop's cultivation has different, more transformative effects on spaces as territory than, say, planting carrots or maize.

Rubber also engenders certain class and labor divisions where it has been propagated, particularly in the ways that plantation production has been emphasized. In China it was idealized as a modern, technically complex crop to cultivate. For this reason, state guidance and strict plantation management systems were considered necessary to establish rubber, a belief that Chinese proponents of the crop brought to Laos. With a 7-to-10-year maturation period, rubber requires considerable upfront capital investment to sustain the long time before returns to investment. That said, rubber productivity is less dependent upon the use of chemical inputs, which reduces the barriers to smallholder entry into rubber cultivation. Whereas other countries interested in promoting smallholder rubber have thus established state credit systems for the purchase of rubber

[8] Despite being introduced across Southeast Asia as a colonial plantation crop in the late 19th century, it is now estimated that between 70-85% of natural rubber worldwide is produced by smallholders. Dove (2016) attributes this to the unique suitability of rubber to smallholder production, including "the ability to intercrop *Hevea* in swidden fallows, often on very marginal soils; the ability of *Hevea* to grow and even thrive in weedy, agroforestry-type environments; the capacity for *Hevea* to be tapped intermittently, as other demands on household labour wax and wane; and the ability for the raw latex product to be processed with very simple equipment" (p. 2).

seedlings and other up-front costs, its proponents in China argue that rubber cultivation is best undertaken as a state-supported enterprise.

Labor regimes associated with rubber production differ from both typical annual crops and tree plantation crops. Rubber trees can be tapped every 2-3 days instead of needing to grow for decades, as some tree crops must, before being harvested at a single long-anticipated moment. When rubber was first established in China in the 1950s, the country's political leaders were exploring how to replicate the conditions which led Soviet industrial workers to revolution but with a populace still primarily rural and engaged in agricultural production (Sturgeon & Menzies, 2006, p. 24). They aimed to implement a 'socialist production system' for agriculture, within which rubber was envisioned as an ideal tool for mobilizing class consciousness, not on the factory floor but in the plantation row (Janet C Sturgeon & Menzies, 2006; Xu & Yi, 2015). Rubber workers were organized into tapping cadres that resembled factory work teams, and this type of daily tapping work was considered more technically demanding, modern, and thus more aligned with socialist ideals than other forms of agricultural labor.

The climates and types of land on which rubber can grow have also contributed to its political affect. Due to its importance as a raw material, rubber was grown on colonial plantations established across Southeast Asia (primarily across the spaces now known as Indonesia, Malaysia, with small plantations established in Cambodia and southern Vietnam and Laos) in the first half of the 20th century. These regions share a range of climatic similarities with the Amazon (where rubber originates) including an extended rainy season and a frost-free tropical climate (Aso 2018, 5). Even the warmest regions in China are higher in altitude than most of the rubber production regions of Southeast Asia and experience occasional frost during winter months which devastated the earliest cultivars transplanted from Malaysia. These sub-tropical regions are also some of the country's most ethnically diverse, located far from the country's political center in Beijing in the northeast or its economic centers along the east coast. The overlapping geography of spaces climatically suitable to rubber production and spaces where non-Han populations reside has been important to the history of rubber in China.

Southern Yunnan, particularly the Xishuangbanna Dai Autonomous Region which would become the country's second rubber base after Hainan Island, was depicted in state propaganda in the 1950s (and long before and afterwards) in typical frontier myth fashion (Tsing, 2003): peopled by uncivilized ethnic minorities, a loosely governed and underdeveloped land of tropical jungles (Glassman, 2005; Solinger, 1977; Su, 2014). These border areas are dominated by Chinese ethnic minority[9] groups who primarily practiced shifting cultivation before the arrival of rubber. Replacing these jungles and shifting cultivation fallows with the orderly rows of Yunnan State Farms' rubber

[9] The term 'ethnic minority' (小数民族) in China is a political category which, from an anthropological perspective, is fraught and unreliable. It is formed through the lens of a hierarchical relationship between Han Chinese (the dominant ethnic group in China), who dominate both political and economic institutions of power in the country to this day, over the country's diverse by vastly outnumbered ethnic groups. Many of the ethnic groups I mention in this dissertation are far more fluid than Chinese state categorizations reflect, a more nuanced treatment is beyond the scope or central focus of my study. For a more complete treatment of the politics and historical formation of the concept of ethnic minorities in China, see Mullaney (2011) or Yu (2016).

plantations enabled the state to assert control and make the region into a legible landscape. The establishment of rubber in these places has been justified through classic frontier discourses – the construction of these spaces as underutilized, underpopulated, and insecure – which are then used to suggest state intervention and market integration are needed (Sturgeon, 2000; Sturgeon, 2004a, 2004b, 2010; Sturgeon & Menzies, 2006).

Although rubber was initially planted in flat lowlands across colonial Southeast Asia when it was introduced in the late 19th century, it has been shown to be productive when grown at higher-elevation sloping lands up to 800 masl as well. Whereas many cash crops compete for valuable low-elevation arable land, Chinese and Soviet scientists developed rubber varieties resistant to frost and productive on higher-elevation sloping lands at up to 800 masl. This has meant that as rubber expanded across northern areas of mainland Southeast Asia (southwestern China, northern Vietnam and Thailand, and now northern Laos and Myanmar), the most common land cover it replaced was upland forest and shifting cultivation fields and fallows (Fox & Castella, 2013; Ziegler, Fox, & Xu, 2009). Thus, in China and Laos, the suitability of rubber to upland cultivation solves a long-standing problem for both states: the desire to draw upland spaces into the orbit of state control, in part by sedentarizing shifting cultivation and replacing it with a permanent, regularly tended crop.

This dissertation demonstrates how the biophysical aspects of the crop have become inseparable from its material and cultural characteristics as a commodity. Rubber production has dramatically transformed landscapes and livelihoods on both sides of the Sino-Lao border. In the process of this transformation, the materiality of rubber has articulated with specific territorial and political logics of both state territorial control and the creation of national subjects. Both of these political projects were intensively carried out in the border regions of Yunnan Province where rubber has been established. My focus on rubber therefore allows me to highlight a unique set of contradictions between China's socialist past and its globally integrated future. Throughout this dissertation, I use the history and recent evolution of China's rubber sector as it moves from Yunnan into Laos to understand how land politics, state formation, border security, and transnational trade and investment are intertwined.

1.3 The Shifting Peripheries of China's Global Integration

This dissertation contributes to a broader project of analyzing the implications of China's rise as an economic superpower through the lens of Chinese companies' approaches to resource extraction and intensive agricultural production in the developing world. China's transition from a control economy to a market-based economy has resulted in a number of contradictions in how the state relates to Chinese companies, state-owned and private. While the state still intervenes heavy handedly in economic affairs, particularly in firm-level decision-making in strategic sectors like rubber, it has also drastically reduced state support for those sectors and slowly exposed firms to the pressures of global competition. I explore how the Chinese state-capital relationship has changed in the context of China's shift toward "Going Out," or more specifically how state support for and control over Chinese firms functions when those firms invest beyond the country's borders. In my analysis, I align with Lee (2017) who sees important distinctions between the logics of accumulation of Chinese state capital and other forms of transnational private capital. She asserts that, most Chinese investors operate according to the logic of profit maximization typical to all forms of transnational private capital. Chinese state capital – firms and investors backed by the Chinese state – in contrast, follow a logic of encompassing accumulation in which interests beyond profit, particularly those aligning with Chinese state political priorities, are pursued. Furthermore, I use Klinger and Muldavin's (2019) notion of China's global integration – described as the integration of new resource peripheries into the sphere of Chinese economic activity – to conceptualize Chinese land investments as serving Chinese state interests without necessarily threatening host country territorial sovereignty.

The patterns and characteristics of China's global integration playing out today are rooted in the country's ongoing transition from a socialist economy. After the country's establishment in 1949, the Chinese Communist Party (CCP)[10] divided the countryside into agricultural collectives and urban areas into work units. All economic activity was organized around state production targets and all economic enterprises were state-owned. As I describe in Chapter 2, the State Farms where Mr. Wen grew up can be understood as the state-owned enterprises (SOEs) of the agricultural sector and were formed out of border military units who found themselves unemployed and underutilized after the civil war was won. State Farms were concentrated in the border regions where they were charged with the interlinked tasks of establishing large agricultural communes to feed themselves and supplement the national grain supply, enhancing border security, and performing various land transformation projects (Zhang, 2010). Like industrial SOEs, the State Farms are governed not by regional state apparatuses but by separate bureaus (currently named the State-owned Assets Supervision and Administration Commission and the Bureau of State Farms and Land Reclamation, respectively).

Reform and Opening, which began in 1978, was a watershed in the transformation of China's political economy but reforms have been gradual. Whereas the Soviet Union underwent what Nolan (1996) refers to as "a programme of rapid privatization conducted under conditions of economic shock therapy" (p. 240), China's approach to reform was incremental and experimental – what Enríquez (2010) describes as a reconfiguration of socialism instead of complete abandonment. As such, the decoupling of the Chinese state's governing and economic activity has been slow, uneven, and remains incomplete. Under Reform and Opening, the agricultural cooperatives around which rural China was previously organized were dissolved through the early 1980s and replaced by the Household Responsibility System. Under the new system, collectives' lands were divided up and allocated to individual households who were granted usufruct land rights and became the primary production units (Lin, 1988; Tilt, 2008; Trappel, 2015). On a slower timeline of change, industrial SOEs and the State Farms have been gradually and selectively reformed. The state has also incrementally removed barriers to international trade, deprioritizing (though retaining in strategic sectors) the goal of economic self-reliance (Thomas, 2019; Tisdell, 2013; Yang, 2019). Foreign investment was allowed

[10] The CCP is the founding and sole governing political party in the country. Formally, the structures of the CCP and the Chinese state are separate, and many state institutions – including state enterprises – will have both CCP leaders and state leaders who cooperate in governing. Almost all state leaders in China are CCP members and although efforts were made in the 1980s to separate party and state, these were abandoned in the 1990s. In extremely broad and imperfect terms, the CCP can be described as establishing political directives and outlining general policy, while Chinese state institutions are tasked with implementation.

with the realization that the country needed an influx of capital and technology in order to become globally competitive (Nolan, 1996), and urban land markets were slowly liberalized, unleashing a rapid increase in capital accumulation and urban development in the 1990s (Hsing, 2010).

While most of the country' economy has been restructured and economic activity is now largely driven by market forces instead of being planned and directed by the state, the Chinese state still exercises considerable control over China's economic system (Huang, 2012) and self-reliance continues to be a driving logic in the country's economic planning in certain sectors (Kerr, 2007; Tisdell, 2013). SOEs remain dominant in sectors the state has labeled 'strategic,' including rubber, and Chinese state agencies intervene in economic activity far more than in liberal market economies (Naughton & Tsai, 2015; Yu, 2014). But the relationship between state and capital takes different forms, ranging from the state directly controlling or intervening in some firms' decision-making, to providing support or market advantages through preferential policies, to integrating political leaders into firm management roles (Gang & Hope, 2013). Chinese state decentralization has also progressed in parallel with the country's global integration, further complicating the state-capital relationship as province level authorities play an increasingly important role in supporting and overseeing Chinese investments beyond the border. And thus, the reality of what constitutes 'state support' or 'state intervention' is not characterized by a singular pattern or process. Rather, I show in this dissertation that the catch-all framing of 'state support' – when investigated on the ground in fine-grained detail with interviews with investors – is in fact a patchwork of various and often divergent mechanisms of financial support, the exercise of political authority, and the imposition of regulatory oversight, with different outcomes and degrees of influence over firms.

Klinger and Muldavin's (2019) description of China's global integration as a process of extending the 'natural resource hinterlands' is particularly apt in framing my approach to rubber production in the Sino-Lao borderlands. This sense of extending the structures already in place within China resonates with the specific set of political and economic logics I have found to be at work in the spread of rubber. As they do in their analysis, I direct my attention not simply to cross-border links but to how specific rubber production arrangements observed on the ground relate to state tactics of land control and resource governance within Yunnan, and how they may be reproduced as investors move into Laos. It also frames the Chinese land deals I have studied in Laos less in terms of expanding Chinese territorial claims (which might, in turn, be interpreted as threats to Lao state sovereignty), and more in terms of economic relations. Understanding China as an increasingly powerful core in the world capitalist system (Wallerstein, 1974) and northern Laos as a new periphery, my analysis remains sensitive to the emerging China-Laos relationship as an economically exploitative one, even if Chinese rubber investments simultaneously serve to strengthen processes of Lao state territorialization.

My research thus contributes evidence of the grounded processes through which China's global integration proceeds. Chinese state actors across multiple institutions and administrative levels provide financial, administrative, and even diplomatic support to Chinese firms investing abroad, particularly in strategic sectors such as rubber. Still, the ability of the Chinese state to regulate, monitor, and influence firms' operations abroad is far more limited than over their domestic activities (Jones & Zou, 2017). Moreover, Chinese firms must contend with an entirely separate set of politics and navigate a new set of state institutions and actors in host countries which necessarily impact their ability to attend to Chinese state interests. I consider the interconnected nature and contingencies between political economy dynamics in the Chinese domestic sphere, Chinese firms' varied interests and motives as they 'go out', and host country factors from histories of resource governance to current day systems of authority and claims-making over land and resources.

1.4 Methods

In answering calls for a transnational, grounded, comparative approach to understanding China's global integration (Klinger & Muldavin 2019; Lee 2018), this dissertation foregrounds heretofore absent perspectives in the literature: those of Chinese entrepreneurs, investors, and brokers and their investment activities as they unfold on the ground. I examine the production of rubber as a material commodity and cultural symbol on both sides of the border. I do this through interviews with over 90 individual actors aimed at understanding how Chinese rubber deals have unfolded on the ground and comparing the strategies and experiences of different investors in gaining land access, recruiting rubber, and navigating changing policy and market conditions. Although the majority of my interviews were with Chinese actors, I triangulate their perspectives through interviews with Lao state officials, local land users, and sector experts.

My results are based on interviews conducted during a total of 9 months of preliminary fieldwork from 2014-2016, as well as 14 months of field work between October 2016-January 2018. I also draw on research conducted before my doctoral studies as a research assistant in 2012-13. I interviewed Lao and Chinese state officials, Chinese and Lao company managers and workers, Lao farmers, workers, investors, and village authorities, and select experts, other researchers, and development aid workers involved in the agricultural sector or in land investments in Laos. In Laos, I visited I also collected a range of policy documents, sector brochures, and legal documents on individual land deals.

I carried out interviews in multiple sites in China and Laos. In the national capitals of Beijing (China) and Vientiane (Laos), I interviewed central level state officials, academic, sectoral and development practitioner experts, and collected relevant policy documents and state statistics on the rubber sectors in both countries. I conducted over 40 village interviews and in-depth company level studies in three provinces in Laos – Luang Namtha, Oudomxay, and Luang Prabang – and also visited and conducted company interviews at the plantation sites of three companies in Vientiane and Savannakhet Provinces. In China, I conducted village and State Farms unit level interviews in Xishuangbanna but have not specified the township where this research took place in order to preserve the anonymity of my interlocutors.

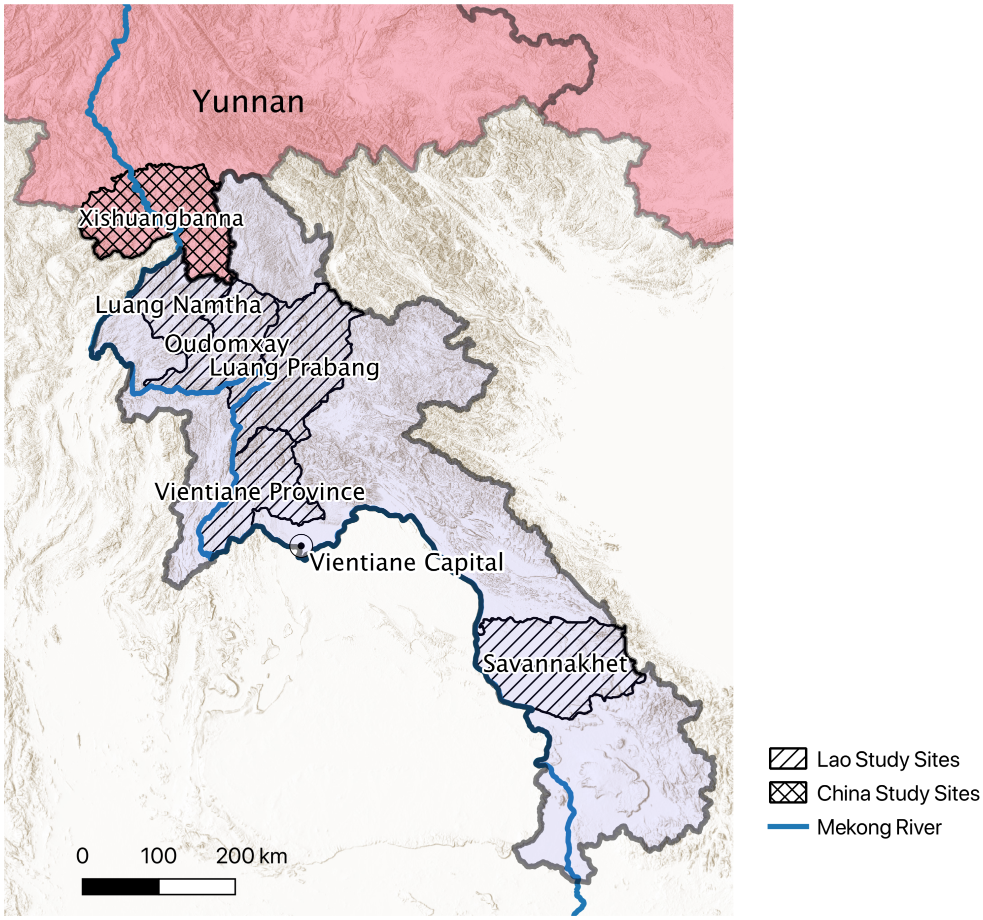

Figure 2. Map of Field Work Sites in China and Laos

In my interviews, observations, and textual research, I was attentive to the social and material aspects of rubber production and resource governance, and aimed to trace the flows of people, capital, knowledge and perceptions around the production of rubber, and material inputs across the border. Drawing on these different sources of data, I reflect upon broader questions of Chinese state-capital relations, discourses and politics of rural development and resource access, and the economic, political, and individual level realities of the evolving ties between Chinese capital and land in Laos.

1.5 Summary of the Dissertation

This dissertation traces the expansion of rubber cultivation along a path stretching from the uplands of southern Yunnan over the border and into Laos. In this introduction, I have outlined key concepts in political ecology and arguments in the literature on land grabs, state territorialization, and China's global integration from which I draw. The next chapters follow the establishment and expansion of rubber production as it moved from the China (Chapters 2 and 3) across the border into the Laos (Chapters 4 through 6). Throughout the dissertation I focus on how, as rubber reaches from China over the Lao border, the political, economic, and social characteristics of the crop translate from the

Chinese to the Lao context consistently in some ways and transformed in others. I argue that rubber serves projects of state territorialization in both China and Laos, but in distinct ways and with different implications for rural development, resource governance, and the political economic structure of the rubber sectors in each country.

The next chapter (Chapter 2) traces the history of the relationship between the Chinese state and Yunnan State Farms, the province level state-owned enterprise around which Yunnan's rubber economy was structured. Since rubber was first introduced in the 1950s, the crop has been categorized as a strategic resource by the Chinese state. I argue, however, that the ways in which it is deemed strategically important has shifted over time. Initially, the state considered self-sufficiency in rubber pivotal to national security and economic progress. As the State Farms system expanded, rubber became a mechanism for state territorialization, driving the transformation of the uplands into plantations and drawing an influx of Han Chinese migrant laborers to "settle the borderlands"[11] by planting rubber. Since the 2000s, rubber continues to be considered a strategic crop but the pursuits of self-reliance in rubber and of state territorial control through plantation establishment have given way to the pursuit of a secure supply of rubber from Laos through the expansion of rubber over the border into Laos.

In Chapter 3, I describe the design and implementation of the Opium Replacement Program (ORP), an initiative implemented jointly by the central state in Beijing and the Yunnan provincial government. I argue that the Yunnan provincial government mobilized the symbolic power of rubber as a tool for development, and opium as a threat to political stability and progress, in ways which ultimately served provincial state interests. Furthermore, the incentives and advantages which the ORP provides Yunnan-based agribusinesses, and the institutions established to govern the ORP at province level, have established Yunnan as a hub for cross-border agricultural trade and processing, and cemented the Province's status as the gatekeeper and development partner to Southeast Asia. The ORP was established in 2004 and was aimed at reducing opium cultivation in Laos and Myanmar, on the other side of Yunnan's border, by subsidizing investments in legal alternative crops, including rubber. It catalyzed a wave of Chinese agribusiness deals in Laos, most of them investments in large-scale rubber plantation, and the Chinese state support provided to companies participating in the ORP continues to shape the Lao rubber sector today. I examine the institutional processes through which the ORP was initiated, designed, and implemented, and within that process I trace how state-capital relations are renegotiated and reformulated through the concept of development cooperation. As such, the ORP has helped cement Yunnan Province's role as a "bridgehead"[12] in China's global integration.

In Chapter 4, I shift my focus to the contemporary process through which Chinese investors have sought access to land in Laos to grow rubber. In this chapter, I document Chinese rubber investors' varied experiences navigating the Lao regulatory context and negotiating with a number of actors in their pursuit of access to land for investment in

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[11] *zhibian* 支边, short for *zhichibianjiang* 支持边疆 which is also translated by some sources as 'support the border or 'settling the frontier'.

[12] A bridgehead or *qiaotou* 桥头 is a Chinese term used in state economic planning policy to signify a hub of trade or key gateway to neighboring regions beyond the country' borders.

Laos. I situate these experiences within the broader regulatory context for land investments, rooted in a history of forest protection programs in the 1980s which evolved into land titling initiatives in the 1990s. I argue that Chinese rubber investments fit into the Lao state's long-standing efforts to extend territorial control to the uplands of northern Lao through land and resource governance policies. I show that while most firms obtained formal use rights to large amounts of land, they faced obstacles in actually gaining access to it. Further still, I reveal how interests of different state institutions are often poorly coordinated or contradictory. This chapter therefore demonstrates that, while the history of rubber production in China (Chapter 2) and the Chinese state level drivers of rubber investment (Chapter 3) indeed catalyzed and shaped the flow of Chinese capital over the border, the Lao context of land governance and agrarian change defined the patterns of Chinese rubber investment and relations of production that have emerged.

In the fifth chapter, I examine the market relations that have arisen between Chinese rubber investors and smallholder rubber producers in Laos in the tapping phase. Initially, Chinese investors sought large, contiguous plantation spaces. Instead, because smallholder rubber production was established before they arrived and compounded by the obstacles investors faced to gaining access to land (described in Chapter 4), most investors held small, fragmented rubber territories interspersed across the landscape with smallholdings and other land uses. I argue that this spatial arrangement of smallholder rubber posed considerable challenges to Chinese companies' operations, particularly for ORP companies in the tapping phase who needed to collect certain amounts of latex[13] to qualify for ORP quotas. As a combined result of the structure of the quota system, the structures of rural land access and agricultural livelihoods in northern Laos, and the spatial arrangement of Chinese rubber plots, Lao laborers and farmers have been able to resist companies' efforts to control market access and flows of latex.

In the sixth chapter, I focus on the shifting approach to rubber investment taken by Yunnan State Farms in Laos. Whereas the company initially sought access to vast areas of land, it struggled to obtain even a fraction of that area and has since changed its approach to focus on consolidating power in downstream activities and is rapidly becoming the main hub for latex processing and export in northern Laos. This chapter describes how, despite considerable setbacks and obstacles, YSF has come to exert extensive influence over the Lao rubber sector beyond its own plantations. I argue that its ability to do so has centered on its closer relationship to the Chinese state as an SOE, but that it has adapted the way it mobilizes that relationship in Laos based on lessons learned in dealings with Lao communities and the Lao state.

Finally, in a brief conclusion (Chapter 7), I outline the broader implications of this study of Chinese rubber investments in Laos. Rubber has transformed not only landscapes where it is cultivated, but also sociopolitical relationships and systems of state territorial control surrounding it. I reflect on the ways in which Chinese rubber investments articulated with Lao state processes of territorialization and local processes

[13] When rubber is initially tapped, tappers harvest the liquid latex rubber that flows out of the tree. I use the term 'latex,' which technically refers to a milky liquid excreted by a wide range of plants when the protective layer of bark is wounded or cut, to refer to rubber before being processed, when it is in its raw, liquid form of cup or tub dried lumps, which are coagulated but not yet processed. This helps me to distinguish between the rubber product after it is tapped and the investors' rubber tree holdings.

of agrarian change. I interpret this as suggesting that, instead of inserting itself unilaterally into host country contexts and obtaining the resources and land it seeks without contest, Chinese capital undergoes a contingent and contested process of embedding into host country contexts. This process changes both the operating approaches and strategies of Chinese companies and their relationship with the Chinese state. I suggest that this case reveals the constantly shifting relationship between Chinese firms and the Chinese state as they invest overseas, and the need for ground-up, transnational studies to understand the dynamics of global China and its implications for the rest of the world.

2 History of a Strategic Resource: Yunnan State Farms and the Taming of the Borderlands

2.1 Growing Contradictions in the State Farms Rubber System

Mrs. Zhou always wears a delicate dress when we meet, along with a smear of bright lipstick to show that she works in an office, but her hands are thick and strong enough to handle a rubber tapping knife expertly. She lives with her husband on the State Farms commune[14] and was promoted from a management position to the Communist Party Secretary[15] of her branch in 2009. China's State Farms were formed out of borderland military units tasked with claiming uncultivated lands in borderland regions, deemed 'wastelands,'[16] for the state and transforming them into agricultural production units (Woodward, 1982; Zhang 2010). State Farms were administered separately from collective farms and agricultural communes and were charged with producing surplus staple crops for national consumption and stabilizing and integrating the border regions. Yunnan's State Farms system (YSF) is smaller than the extensive systems established in northwestern China and XinJiang Province, but they were made responsible for cultivating rubber: a crop deemed pivotal to national economic interests and security. They also drew a massive influx of Han Chinese workers into one of the country's most remote, ethnically diverse, and – in the eyes of the Chinese state – politically insecure border regions at the time. As such, the establishment of rubber plantations through the YSF system was a pivotal driver of state territorialization of the borderlands of southwestern Yunnan.

For multiple generations, the lives of YSF plantation workers have been intertwined with the status of rubber in China as strategic to national interests. In this chapter, I trace the history of rubber's establishment and expansion in Yunnan through the perspective of State Farms workers like Mrs. Zhou. I argue that rubber remains strategic to the Chinese state, but that the ways in which it is strategic and the corresponding forms of support and protection the state provides the domestic rubber

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[14] Yunnan State Farms is headquartered in Kunming, the province capital, with multiple township level branches, each with their own plantation land and independently functioning residential area where its workers, divided into production teams, reside. I refer to these residential areas as communes for lack of a better term – the residential areas along with the entire branch's land holdings are referred to as 'the State Farms' and designated by the name of the branch number. They resemble independent village units but most are not classified administratively as villages and are managed under the State Farms administrative organ of the government instead of under the local township government as villages surrounding it are.
[15] In CCP organizations, Secretary is one of the highest leadership positions.
[16] Wasteland reclamation in China's history refers to efforts initiated by the Nationalist government in the 1930s and 1940s, revitalized by the CCP after the People's Republic of China was founded in 1949, to transform certain landscapes for military and national security ends. The term "wasteland" comes from huang (黄) in Mandarin, an umbrella term used to refer to underpopulated, uncultivated land, which also carries the connotation of a desolate, neglected space in need of civilizing and modernizing. The term holds important parallels to English language constructions of frontiers. Like frontiers, wastelands were the target of Chinese state territorial projects focused on enclosing land for the state, rendering it more legible, transforming local populations into citizens, or mobilizing people from other regions to populate, settle, and therefore transform these regions.

sector and the YSF system in particular have changed. Considered strategic to China's industrial development and military security, retaining a domestic supply of rubber is considered a national priority. The Chinese rubber sector is thus protected by high import tariffs and customs controls on imports, and regulations prevent against cutting down and replacing rubber produced domestically. Its utility as a territory securing device, however, is less important today than when it was first planted in the hinterlands of Yunnan in the 1950s. From a central state perspective, Yunnan is now territorially secured as part of the Chinese nation-state. This shift in rubber's strategic importance has led to major restructuring of the domestic rubber sector and the political logics through which rubber, the State Farms, and its workers are understood.

Mrs. Zhou was born in 1956 in Hunan Province, the birthplace of Mao Zedong. Her parents moved the family to Xishuangbanna in the 1960s to help establish a branch of the State Farms. Her whole life since then, she has worked and lived on one of the smaller YSF branches in a township close to the Lao border. She and many of her colleagues I interviewed at her branch of YSF recalled to me that their parents saw themselves as answering the call of Mao to his fellow Hunanese to migrate to the periphery of the newly formed nation and develop its borders.[17] She grew up occasionally tapping rubber trees when the family needed extra hands to manage their assigned plots, but she gained a position in the management office when she was in her twenties which consumed most of her time. Her husband had also grown up on the same State Farms branch and worked as a plantation tapper. They earned a steady if meagre income but they described their living situation for most of their lives as "stable" as most basic expenses of YSF workers, referred to as 'social welfare benefits' (which included the cost of their one room home, school fees for their son to attend the State Farms school system, health insurance, and a modest pension) were covered by the State Farms as is common for most SOE workers in China.

Workers like Mrs. Zhou and her husband accepted their humble living standards in part due to their loyalty to the ideals the State Farms represented. They grew up in an era when state-owned enterprises were celebrated as the linchpins of the national economy. Furthermore, the political rhetoric of state leaders portrayed self-reliance through domestic production of strategic resources like rubber as foundational to national security and the political authority of CCP rule. State Farms, which were supposed to contribute to this project of self-reliance, were described in 1959 as the "highest form of socialist agriculture" by the Chinese Minister of State Farms (quoted in Carin 1962, p. h). In the early years of YSF's development when Mrs. Zhou's family first arrived, YSF workers were praised in government propaganda as model citizens, brave settlers of the frontier regions, and drivers of national progress. Through the following decades, as I will outline in this chapter, rubber cultivation has extended far beyond the YSF plantations. Nowadays, YSF remains a foundational institution in the rubber sector: it sets standards of plantation and processing management, develops and disseminates the latest and most productive clonal varieties of rubber seedlings, and is the favored supplier for

[17] The migrants who moved to develop the borderlands across China during this era are referred to as *zhibian* 支边 (short for *zhichi bianjiang* 支持边疆 which can be translated most directly as 'support the border region' but also sometimes as 'settling the frontier').

many major state and private rubber manufacturers. Nevertheless, YSF has been forced through multiple rounds of major restructuring in parallel with changes in the country's broader political economy since the 1980s. A set of reforms, debated for years starting in 2008 and finally rolled out iteratively in branches across the YSF system between 2009 and 2011, fundamentally altered the previously protected status of YSF workers like Mrs. Zhou and her husband. These reforms would transform Mrs. Zhou from a proud State Farms worker to a vocal critic of the system.

The multiple rounds of YSF reforms have not changed the fact that rubber continues to be treated by the Chinese state as strategically important to national interests. The domestic rubber sector is protected by high tariffs on imports, State Farms managers are limited by state regulations from replacing rubber with other crops, and even independent rubber farmers need permission from the State Forestry Administration to cut their own rubber trees (Interview, Xishuangbanna, 11.2017).[18] Workers, on the other hand, have come to be seen by many, including certain Yunnan provincial government leaders,[19] as a burden on the State Farms system. The 2009 reforms ended YSF's long standing system of providing workers' salaries and social welfare benefits, instead recategorizing them as contractors and allowing them to freely sell the latex they tapped from the trees on their plots on the market instead of through the tightly controlled YSF system. Despite continued state protections of the domestic rubber sector and the State Farms' vast plantations of rubber trees, the workers would no longer be protected, and their incomes would be based instead on rubber prices. "That," said Mrs. Zhou, emphatically tapping her forefinger on my notebook, "is the big contradiction[20] you should write about!"

In this chapter, I explore a number of threads foundational to the rest of the dissertation. In the following section, I explain how rubber came to be considered strategic and how the concept of strategic resources fits into the Chinese state's emphasis on economic self-reliance and its relationship with SOEs like YSF. Next, I lay out the history of rubber and the rise of YSF as mechanisms for establishing Chinese state control in a border region. In doing so, I link the Chinese state's shifting political designs for the region with its reasons for promoting rubber – or why rubber is considered strategic – and show how these shaped the political economy of the State Farms system. I then use the 2009 reforms to reflect upon how this system has been fundamentally altered under China's "Go Out Policy", and what that means for the workers who established the Farms but seem to play a less important role as the State Farms invest abroad. I conclude by reflecting on how viewing the YSF reforms from the perspective of lifelong workers and leaders like Mrs. Zhou exposes tensions that arose as China shifted from a state-led political economy to a capitalist market model, and later to one that is now globally

[18] Cutting down rubber is also restricted due to limitations on deforestation but permits for cutting rubber are subject to particularly strict consideration based on the crop's strategic status.
[19] As described briefly in the Introduction and in greater detail Chapter 6 of this dissertation, state-owned enterprises are not synonymous with the Chinese government or the CCP, in fact state ownership can connote a variety of arrangements and have very different implications for enterprise operations and decision-making. That said, SOEs do enjoy considerable forms of state support and protection, while also having certain obligations to serve state interests in ways that vary across firms and sectors.
[20] *Maodun* 矛盾

integrated – tensions that run particularly high as SOEs are forced to reform. I also suggest how this has allowed the state to promote Chinese rubber investments over the border in Laos, which departs from the historic emphasis solely on domestic production, while still asserting rubber's strategic importance to China.

2.2 Yunnan State Farms and the State-Capital Relationship

The changes in labor conditions that Mrs. Zhou and her husband began experiencing in 2009 are symptomatic of a broader evolution in China's political economy. During the high socialist era when rubber was first established, economic planning was driven by socialist conceptions of national security as rooted in the goal of self-reliance,[21] particularly in sectors considered strategically important to the country (Kerr, 2007; Riskin, 1987; Shue, 1988). After Reform and Opening began in 1978, the state engineered a shift from a socialist to a market economy, at which point state support for specific sectors and firms began to recede. Overarching political justifications for the state to direct and control economic activities also began to recede. Despite having marketized most of the country's economic activity, the state remains actively involved in what it designates as strategic sectors, firms, and resources. For example, most SOEs were privatized in the 1980s and 1990s, but those in command of strategic sectors were strengthened or expanded through mergers and acquisitions to become consolidated giants in their respective sectors.[22]

The designation of certain sectors and resources as strategic is not unique to China. Many resources are considered strategically important by governments for reasons related to their value, how rare or difficult they are to access, whether they can be imitated or substituted, and how vital they are to key sectors or products upon which that country heavily relies. In exploring rubber's history as a strategic resource for China, I follow scholarship on other strategic resources such as rare earth metals and oil in taking the designation of 'strategic' as a socially produced category built around politicized narratives of scarcity and the emergence of the concept of resource security (Kiggins, 2015; Klinger, 2018). Global references to 'energy security' emerged after the Arab oil embargo and the resultant oil crisis of 1973 (Jones, 2014, p. 6), and engendered a global turn towards viewing resource scarcity through a security lens within a framework of 'non-traditional security threats' that emerged in the 1980s (Srivastava & Mehta, 2014). The Chinese state has long designated certain sectors and resources as strategic (including oil, natural gas, copper and a number of other minerals). Firms involved in the production or procurement of strategic resources often enjoy greater state support and protection, and flagging profits are tolerated if the tradeoff means securing access to supplies of that resource (Gang & Hope, 2013). For example, Lee (2018) has shown in Zambia that a Chinese state-owned mining company purchased a copper mine (also a

[21] *zili gengsheng* 自力更生 means "regeneration through one's own efforts" but is translated most typically into English as 'self-reliance' when used in reference to economic planning. In the context of socialist era Chinese economic planning, self-reliance meant the ability to meet domestic demand through domestic production.

[22] For more on the history of State-Owned Enterprises and market reforms, see Yu 2014, Szamosszegi & Kyle 2011, Wang et al. 2004.

strategic resource) even after it had surpassed peak production because copper is a designated strategic resource. The company continued operations during periods of global price drops based on the Chinese states desire to preserve a steady flow of copper to the domestic market even if this negatively impacts the profitability of that enterprise.

What is important about the treatment of resources as strategic in China is the particular emphasis leaders have placed on national economic self-reliance through the historical development of China's political economy (Yang, 2019). Self-reliance was initially a campaign slogan used by Mao Zedong to boost morale during wartime scarcity in the 1940s. After the Sino-Soviet Split in the 1960s, as the country weaned itself off Soviet support, self-reliance became seen as the foundation of political independence and became a nationalistic rallying cry. Chinese economic reliance on the Soviet Union was a result of its own underdevelopment and the strains of extensive trade embargoes – including restrictions on copper and rubber – that Western nations placed on China to punish it for its involvement in the Korean War (Cain, 1995; Tisdell, 2013). China's emphasis on self-reliance was not unusual for the time; it coincided with a global emphasis in development economics, especially among developing nation-states, on import substitution industrialization for developing countries. The rise of neoliberal economics since the 1980s swept away allegiances to this approach in most countries, but China's acute economic isolation during its formative period engrained self-reliance deeply in Chinese ideals of patriotism, geopolitical independence, and state power. The rhetoric of self-reliance is now experiencing a renaissance in China in the context of the US-China trade war (Thomas 2019).

Although the Reform and Opening Policy (established in 1979) marked a gradual move away from Mao era isolationism and towards economic openness and global trade, China's leaders retained their commitment to self-reliance under a doctrine of "taking self-reliance as the principal means and external assistance as a subsidiary" (China State Council translated and cited in Chen 1992, p. 57; see also Yang, 2019). Reforms were done selectively, with a focus on strengthening domestic industry and fueling economic growth but with carefully set limitations on which sectors were privatized. Self-reliance, and the state support necessary to maintain it, was thus never completely abandoned but became an objective reserved for sectors providing resources and services identified by the state (vaguely) as important but scarce, thus strategic. For example, foreign investment was initially restricted to Special Economic Zones, partly in order to curb the ability of "negative Western influences to penetrate China" and thus retain China's independence (Tisdell, 2013, p. 243). Even since the country joined the World Trade Organization in 2001 and increased its pursuit of global integration and growth-oriented planning, many argue that the country's leaders remain committed to self-reliance in an approach characterized by Kerr (2007) as "selective and strategic integration that bends globalization to China's long-term nation-building goals" (p. 78), rather than pursuing an unfettered capitulation to global capitalism.

Rubber was first designated a strategic resource in China in 1951, in direct response to the trade embargo by Western countries (initiated by the US) on Chinese imports of rubber and other key industrial materials. The embargo seriously limited China's ability to import rubber tires, which primarily went to military transport use, and to parts for industrial machinery (Cain, 1995, p. 49). That year, the central government in

Beijing approved the "Decision on Cultivating Rubber Trees" and in 1952 set in motion a plan to develop 8m mu (533,333 ha) of rubber in Yunnan province (2m mu) and on Hainan Island (6m mu) (Sturgeon & Menzies, 2006, p. 24). Soviet Union agricultural scientists were sent to assist in the effort, as up to that point in time rubber was primarily cultivated at lower altitudes and tropical latitudes than found in China. In this earlier era, then, the pursuit of self-sufficiency in rubber was an economically rational response to a strategic (military) need.

To this day, long after the embargo ended, rubber is still categorized as strategic by the Chinese National Reserve Bureau.[23] In 2007, the State Council issued the No. 10 Opinion on Promoting the Development of China's Natural Rubber Industry which confirmed and further clarified Beijing's view of natural rubber as "an important strategic material and industrial raw material" offering guiding ideology and principles for the further expansion of China's rubber industry through both domestic upgrading and investment abroad. Interlocutors I interviewed across the Yunnan rubber sector cited continuing state protections of the domestic rubber sector as justified by the threat of future embargos. "Rubber trees are our country's strategic resource" one YSF branch leader told me, and while "right now all is quite peaceful," he asserted that the state would preserve China's rubber plantations in case of war (Interview, Xishuangbanna, October 2017). As a result, domestic rubber producers enjoy various forms of state support, trade protections, and market advantages. Rubber is important in ways that allow a broad constellation of actors to benefit from this evoking of rubber as strategic. These range from central state actors in Beijing, to the Yunnan provincial state, to Lao state actors at different levels, to the Chinese firms – both state and private – investing in rubber in Laos. The long history of rubber's promotion and protection has made the sector especially important to Yunnan province's development and many parts of the provincial economy are structured around rubber.

But as China becomes increasingly economically intertwined with the rest of the world, the ideology of self-reliance in strategic sectors creates internal contradictions between parts of the economy which have been marketized and those which remain supported by the state – especially as those parts are increasingly integrated with each other and the larger global economy. For example, the continued protection of the domestic rubber sector directly contradicts efforts over the last two decades to establish and expand domestic tire and automobile manufacturing. The state levies a hefty 37% tariff on natural rubber imports to protect domestic producers and keep them from shifting out of this strategic crop (Interview, Kunming, August 2018). Protective tariffs serve as a lifeline without which domestic rubber cultivation would collapse, but they also drive up input prices for tire manufacturers, who have called on the state to lower rubber tariffs for decades to no avail (Reuters, 2003; Patton, 2015). Domestic rubber production only meets 20% of China's overall demand for natural rubber, thus the other 80% comes from imports. China consumes 41% of globally traded rubber, most of which is used by its tire manufacturers (Research & Markets 2019). Its demand for rubber has risen rapidly in the last few decades, driven by a growing domestic automobile manufacturing industry. The Chinese state also worked hard in the early 2000s to attract

[23] *Guojia Wuzi Zhanlüe Ju* 国家物资储备局

the top global tire companies, offering them a range of incentives to establish manufacturing operations in China, while also investing state support into upgrading domestic tire manufacturing operations (Interview, Beijing, December 2016).[24] The practice of protecting domestic rubber as strategic thus comes at the cost of having to support the tire sector – an economic contradiction which only deepens as China's economy becomes more globally integrated.

Thus, within the process of reforming the YSF, the fact that rubber continues to be considered strategic is important. This designation of rubber as a strategic resource has been so intertwined with the process of state formation, landscape transformation, and economic and cultural integration in Yunnan, it cannot easily be abandoned. Moreover, rubber's role as strategic is used by different actors to justify various state policies (e.g. state control over cutting down or replacing rubber with other crops) around rubber.

On the other hand, as the CCP has reshaped state-capital relationships over the last three decades, SOEs have become less central as instruments of state economic intervention in some aspects of national policy and economic practice. Instead, there is considerable diversity in the links between capital and the Chinese state (as noted in the Introduction to this dissertation). SOEs have been displaced from their historical position linked to and controlled by the state through a vast restructuring of the SOE sector. Many scholars argue that China's SOEs now operate relatively independent of the state, as the state sector has been largely decentralized with the political and business management roles in SOEs split and state direct involvement in SOE activities drastically reduced (Jones & Zou, 2017, pp. 744-746, Gonzalez-Vicente, 2012). But certain sectors, particularly those that have been labeled strategic for various reasons, have seen the consolidation of SOE power both through state-structured mergers and acquisitions of small firms by large sectoral SOEs. Moreover, while plenty of private firms exercise the same autonomy in China as they might in a liberal market economy, there are still a variety of ways the state controls private capital outside of the SOE sector, including the placement of political leaders in private firms, and private firms operating in heavily state-controlled sectors (Leutert & Haver, 2020). There is thus considerable diversity in how the Chinese state intervenes in the economy through firms, depending largely on the sector and the firm's ownership structure, but also through a range of less measurable factors such as the links between firm leaders and state institutions.

I now turn to how the State Farms emerged and have transformed through China's Reform and Opening leading to the round of reforms Mrs. Zhou has experienced most recently. State Farms grew out of border military units; their function has long been tied to the establishment of state authority and economic development in the country's border regions. This territorial link constitutes an added layer to the relationship between YSF's economic operations and the state. Whereas many other State Farms focused on a range of land transformations and productions of staple crops for local consumption, YSF had the special task of establishing the strategic rubber industry. These factors amplify the political importance of YSF to state power in the region and have made marketization reforms particularly controversial. In the following sections, I show that workers'

[24] These subsidies were sizeable enough to spark anti-dumping measures in the US and Europe and a resultant WTO intervention.

critiques of those reforms have been consistently made in reference to rubber's historical status as strategic to national security and self-reliance. This is important because it shows how rubber's strategic value is changing, and that workers' affirmation of its' strategic status is also a struggle over meaning: workers are also making claims to their own value vis-à-vis the crop and the latex, even in changing political economic circumstances.

2.3 Rubber in China's Hinterlands

The rubber sector in China has gone through drastic shifts. Since rubber's establishment in the 1950s, the nature of state involvement in the sector has changed along with shifts in the role of rubber cultivation within processes of state territorialization and economic development in Yunnan. This section presents the history of the rubber sector in Yunnan Province, divided into three periods during which the strategic importance of rubber, and therefore the structure of the rubber sector in Yunnan, changed. . In each period, I focus on the land, labor regimes, and capital in relation to Chinese state support and involvement in the rubber sector.

2.3.1 1950s-70s: Taming the Borderlands

From the 1950s through the 1970s, the cultivation of rubber expanded across the uplands of the sub-tropical region of Xishuangbanna in southern Yunnan Province. The CCP led by Mao Zedong had just won a hard-fought and drawn out civil war against the KuoMinTang (KMT) to establish the People's Republic of China in 1949. Some of the key moments in the war between the CCP and the KMT occurred in Yunnan, as it was one of the last strongholds of the KMT army. The CCP was successful in part because it resorted to mobilizing a number of powerful warlords in the province – leaders of various ethnic minority groups in the region to whom the CCP appealed and promised relative ruling autonomy (Summers, 2013). A portion of the KMT army was pushed into Myanmar[25] and even after Chiang KaiShek and the KMT had lost the war and fled to Taiwan, the troops pushed out of Yunnan (referred to as the 'lost army') continued to fight from their position in the border jungles of Burma to attempt invasions into Yunnan seven more times before giving up in 1952. The CCP therefore considered border security in Yunnan to be unstable, uncomfortably dependent on the loyalty of local ethnic "minority groups", and of urgent strategic importance to maintaining the legitimacy of CCP rule.

Prior to those events, in 1951, the US placed a trade embargo on China's imports of rubber in response to China's support for North Korea in the Korean War, as mentioned above. At that time, China's economic policies on promoting industrialization

[25] This group of KMT soldiers would eventually be pushed from Burma into northern Thailand where they were eventually recruited by the Thai government to fight Maoist insurgencies in the Thai uplands. In strange parallel to the Han Chinese that would come to Yunnan to help the CCP secure the borderlands, these communities also eventually turned to rubber and tea tree production under Thai state projects to develop the Thai uplands. For a longer history of this 'lost army' of the KMT see articles on Santikhiri or Doi Mae Salon.

and achieving self-reliance depended heavily on access to natural rubber. The US trade embargo threatened both of these state objectives and, in response, the Chinese state rolled out a plan to establish a domestic rubber producing base first in Guangxi Province, and later in Hainan and Yunnan Provinces: the few places in China suitable to growing rubber (in these latitudes higher than rubber's conventional growing areas).[26]

Rubber was promoted in these provinces through the State Farms system, which came to function as agricultural state-owned enterprises. As stated, State Farms were originally formed in the borderlands out of what were military border security units; spaces where the People's Liberation Army could grow grains and other staple foods (Zhang 2010). At the time, Yunnan and Hainan were considered remote border areas, which were difficult to supply from their Eastern hubs. After the establishment of the People's Republic of China in 1949, various military units were left in these border regions and they were reorganized as State Farms, transitioning them from their military defense tasks into borderland security forces. Referred to initially as "production and construction corps," these groups of soldiers were charged with what was termed "wasteland reclamation" or transforming areas the state saw as underutilized into various agricultural projects. These were managed by the newly formed Rural Reclamation Bureau, which would soon become the Ministry of State Farms and Land Reclamation (Lai 2015, 23). Whereas cotton, wheat, and other staple crops dominated the northwestern borderlands, rubber was promoted in Yunnan and across the southwest. This work is widely regarded across China's border regions as a project of state territorialization (Cliff, 2009).

During the YSF's earlier development, CCP leaders were wary of imposing upon the autonomous rule promised to the Dai minority leaders in Xishuangbanna who had supported the CCP against the KMT in the 1940s, and who vastly outnumbered Han Chinese in the region. Dai people dominated the lowlands of Xishuangbanna and focused on wet rice and lowland vegetable and livestock cultivation, while other, less politically powerful ethnic groups inhabited the uplands and performed a mixture of shifting cultivation and preservation of communal forest areas for hunting and collecting non-timber forest products (Scott 1998). These upland areas were therefore easier for the CCP to claim for rubber production as local land users had less clearly demarcated claims to the land, and their claims were less supported by the Dai government.

The military cadres were soon joined by a wave of Hunanese migrants. The first wave came in 1959-60, when 35,000 Hunanese peasants were driven to Yunnan to escape the threat of starvation after the Great Leap Forward,[27] and they quickly found work opening upland wastelands for the emerging State Farms (Yang 2009). Then began an active campaign by the CCP to recruit Han Chinese from Hunan through the mid-1960s, who were encouraged to relocate both by a lack of stable employment in Hunan and by

[26] See Fox & Castella 2013 for a detailed spatial analysis of traditional planting areas for rubber in Southeast Asia as compared to recent expansion in northern montane mainland Southeast Asia and Yunnan.
[27] Hunan was particularly affected by crop failures, and Mao specifically targeted his home province to recruit migrants to move to Xishuangbanna, in part based on the need to relieve the province's population from the crisis there and also based on the perception that Han Chinese from the region were particularly loyal, driven by a revolutionary spirit to serve the tasks of borderland stabilization, and capable of what was seen as more civilized, factory-like work on rubber plantations.

slogans calling them the "sons and daughters of Mao" and encouraging them to be leaders in supporting the borderlands (Hansen 1999, 399). During the same decade, young educated urbanites referred to as "sent down youth,"[28] were encouraged to show their revolutionary zeal, prove their loyalty to Mao and the CCP, and gain experience in manual labor and rural life by leaving the eastern cities to live and work in rural areas (Chapman 1991). The photograph below (Figure 1) of sent down youth in Yunnan was displayed originally in a Cultural Revolution pictorial and conveyed the common depiction at the time of the optimism and wholeheartedness with which these youth committed their labor to developing Yunnan (photograph taken by Zheng 2013, published in Brown et al. 2014). The epigraph below the photo reads:

> "Youth is beautiful only when it is dedicated the the people,
> Life is bright only when it is dedicated to the revolution.
> It is a heavy burden and a long journey to become a worthy revolutionary successor;
> We will move forward following the course directed by Chairman Mao."

From the 1950s-70s, therefore, these waves of in-migration in the name of developing the borderlands had the result of "making the state farms into the most concentrated Han communities in (Xishuangbanna)" (Hansen 1999, 400). Modeled after urban work units,[29] communes were built for State Farms workers which were managed and resourced entirely independently from the surrounding villages and the local government. They enjoyed their own infrastructure, schools, and hospitals (all of which were often better funded and equipped with more modern amenities), and life on the State Farms was organized around rubber production and managed by YSF leadership.

Figure 3. A group of sent-down youth in Yunnan

Throughout these early years, the rubber sector was fully state funded, and all rubber produced was then sold through the state. Instead of profit and efficiency, therefore, the government emphasized the need for a secure domestic supply of rubber for the country. This in turn required research and development necessary to adapt rubber

[28] *Zhiqing* 知青, which is short for *zhishi qingnian* 知识青年

[29] *Danwei* 单位

cultivars used in Malaysia and Indonesia – much warmer climates at lower elevations – and in part meant cultivating a reliable, loyal workforce to open up as much land as the state could claim. The State Farms transformed the upland landscapes of Xishuangbanna deemed wastelands by the state (often swidden fallows of local people) into ordered, legible (Scott 1998) plantations, and in part by bringing in Han Chinese migrants to settle the region (Menzies, 2007). Rubber, therefore, was a tool for the CCP's assertion of state control over landscapes.

The resistance raised by local land users in the face of vast land enclosures and conversions into rubber by State Farms – and resist they certainly did – was countered with CCP discourses of developing the borderlands. Mrs. Zhou and the other workers I interviewed do not recognize local land claims that may have predated the State Farms rubber plantations and during our conversations they portrayed the hills now blanketed with State Farms rubber as empty before their parents arrived. Perhaps their parents told them, as earlier generations of State Farms workers recounted to Hansen (1999), that "We taught the locals that the land here belonged to the country […] We had to teach them that it belonged to the country and that they could not take it" (p. 402). The establishment of rubber by YSF has thus been portrayed by the Chinese state and workers themselves not as an act of enclosure and extraction of value from the region to the state, but as what Yeh (2013) calls the "gift of Chinese development" to the local communities. This gift, in Yeh's formulation, is communicated as generosity on the state's part but also imposes the state's hegemonic power over peripheral regions.

2.3.2 Late 1970s-90s: Civilizing Minorities, Pioneering Development

Through the course of the 1970s, the State Farms began to run up against limits to land and losses of labor. The influx of migrant labor slowed throughout the 1970s, and in 1978, after years of petitioning and dramatic protests across the country, the Sent Down Youth were allowed to return to their home cities (Yang 2009). The result was devastating for the State Farms, which lost a recorded 47% of its labor force in the course of two years (1978-79) (Hansen 1999, 404). The loss of the Sent Down Youth forced the State Farms to change their recruitment practices, turning to the local population. They maintained a long held distrust of local minority groups' suitability for rubber work, maintaining a racialized sense of the superiority of State Farms workers. As a result, Yunnanese workers were recruited from other regions of the province (Interview, Xishuangbanna, November 2017). State repression of religion and culture during the Cultural Revolution (which lasted from the mid-1960s to the mid-1970s) also generated tense relations between government and YSF representatives and local minority communities, making it then harder to recruit workers from nearby (Hansen, 1999). But again, these Yunnanese minority recruits were drawn into YSF work under the auspices of their exceptional status. Mrs. Zhou's assistant Mrs. Li, for example, recounts that not everyone from her parent's hometown in Simao qualified for recruitment. They had to be strong, hardworking, young, and in good standing with local state authorities (Interview, November 2017).

Meanwhile, the rapid expansion of rubber by YSF throughout the previous decades slowed with the shrinking availability of land. In 1979, the Household

Responsibility System was established, effectively closing the land frontier for the State Farms (Sturgeon 2009). The establishment of this system marked the phasing out of agricultural communes as the organizing unit of agricultural production across China. They divided vast amounts of commune land and allocated plots to individual households, thus granting direct use rights and greater control over production processes to families. In turn, the State Farms turned to promoting rubber among the newly landed smallholders that surrounded their estates.

The promotion of rubber among these independent minority households was slow at first. "They didn't understand, and they didn't care to plant, no matter how much the government and the State Farms encouraged" recounted Hu Huabin, who took part in some promotional activities as a botanist in the 1980s and is now the Assistant Director of the Xishuangbanna Tropical Botanical Garden (Interview, MengLun, May 2018). Also likely is that local farmers were more interested in growing a diverse set of subsistence crops for household consumption, as opposed to one single cash-crop (rubber) for the state. But rubber expansion among smallholders began to rise when the Yunnan government went so far as to give out 750 yuan per mu[30] to whoever would plant them. YSF technicians were also sent into communities to demonstrate rubber planting and tapping techniques and the State Farms processing factories expanded their collection activities to nearby villages. From 1994-95, the state established a campaign that promoted rubber as a tool for poverty alleviation, at which point the area under smallholder rubber cultivation came to exceed that on the YSF (Sturgeon 2010, 323). In 2002, a third wave of rubber promotion was launched under the guise of the Grain for Green program, which promoted rubber and other tree plantations as forms of forest cover and further subsidized rubber's expansion among smallholders.[31] As a result, rubber has been planted across practically any available plot in the region, and in 2010 came to cover 22% of all land in Xishuangbanna (Ahrends et al. 2015).

Throughout this period, rubber production expanded but remained organized around the YSF and their preferential treatment by the state. State Farms were the only enterprises allowed to establish rubber processing factories and much of their product was purchased by the state at reliable prices (often fixed through large purchasing agreements), which provided much stability throughout the rubber commodity chain. The State Farms also ran significant research and development activities funded by the state. For example, because the rubber trees used in Yunnan were brought from far warmer climes in Malaysia, researchers worked hard to produce more cold tolerant varietals with higher productivity and suitability to the regional climates of southern Yunnan and developed training standards for both State Farms and non-State Farms workers in cultivation and tapping techniques. YSF was thus still the primary authority in rubber plantation management and controlled the Yunnan rubber sector through its dominance of multiple activities along the rubber supply chain.

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[30] Unit of measure for land in China; 15 mu = 1 ha.

[31] Grain for Green was also known as the Sloping Land Conversion Program, which is a translation closer to the Mandarin term *tuigen huanlin* but less commonly used in English literature. I point this out because the fact that sloping land was targeted meant that many upland areas were transformed, and rubber had historically been seen as particularly suitable for upland production.

2.3.3 2000s-2010s: Privatizing and Going Out

In the 2000s, rubber production in Yunnan became increasingly market driven. Nationwide, all state-owned enterprises began to undergo reforms starting just after China became a member of the World Trade Organization in 2001. China began to open to foreign investment and to push its own enterprises to go out and compete globally with transnational corporations. State-owned enterprise management was given greater independence from CCP leadership and, in 2003, Yunnan State Farms' research branches were turned into state managed research institutes while the State Farms management structures were transformed to more closely resemble private enterprises with management incentives structured increasingly around achieving efficiency and profit gains. Meanwhile, the state allowed the establishment of private processing factories, which began competing with State Farms processing factories for product by adjusting their prices competitively and establishing independent links to rubber purchasers in Eastern China. This and the lack of available land for expansion within Xishuangbanna pushed Yunnan State Farms to establish branches across the border in Burma, Laos, and beyond.

Meanwhile, global rubber prices tripled between 1999 and 2009, which had very different results for YSF workers than for the smallholder rubber farmers surrounding the State Farms plantations. Independent smallholders, the same ethnic minority groups considered unsuitable for rubber tapping in the early years of State Farms establishment, had planted rubber at their own expense and on their own land. As such, they were entitled to whatever proceeds came from selling the latex they tapped on the market and could sell to any buyer, state or private. As prices skyrocketed, they therefore profited handsomely. Mrs. Zhou's neighbor on her State Farms branch recalled to me with envy the experience of watching people in nearby villages building concrete homes, buying SUVs, and hiring wage laborers from outside the region to tap their rubber while they played mahjiang and poker along the newly paved streets of their villages. Everywhere I went in Xishuangbanna people shared stories of rubber farmers across the region becoming rich through rubber during the 2000s.

On the State Farms, in contrast, workers were paid standard salaries regardless of how productive they were or what the market price of rubber was. Improvements in the living conditions of workers had thus been stagnating since the 1990s. Land had grown scarce, the political justifications for seizing it were obsolete, and the State Farms could only increase revenues marginally through technical improvements to existing plantation areas. In 1993, YSF declared that it could no longer guarantee the provision of plots of trees to tap (and the salaries and provision of benefits provided along with those assignments of plots) to future generations of workers. To relieve the pressure, all workers were offered an early "retirement" package. Those who chose to accept it would be released from their obligations to tap their two assigned plots, and be free to seek employment off the State Farms. They were given a significantly reduced retirement pension payment in exchange. This early retirement program essentially incentivized the exit from the State Farms system, especially for workers able to find other types of work. By the 2000s most of the younger generation, including Mrs. Zhou's son, began to leave and look elsewhere for work, most often entering the service industry in other regions of Yunnan and beyond (Interview, Xishuangbanna, November 2017). While many went on to earn far more after leaving, they were also disadvantaged by their lack of access to land or savings after generations of working for the State Farms.

Some reforms were also enacted at the managerial level where profit and market competitiveness were increasingly used to measure success and set managerial performance benchmarks. Workers, meanwhile, remained organized into work units as initially established during the collective era, assigned their standard set of two plots of 300 rubber trees, each with a quota of latex they needed to tap each month in order to receive their set salary. Basic social welfare benefits, such as school fees, medical insurance, and social security, were provided for by the State Farms. Tapping more than one's quota was nominally rewarded if at all, salaries did not shrink or expand with fluctuations in global market rubber prices, and any technical errors in managing their plots (e.g. cutting trees too deep or too frequently, for example) resulted in docked pay.

By the mid-2000s, average incomes among State Farms workers were being rapidly outpaced by incomes off the State Farms. According to one government report, in 2009 the average wages of State Farms workers and staff was 9,679 yuan per year – 40% of the average income per capita across the province, which is already considered one of the poorest regions in the country (Zhang, 2012). To supplement their meager State Farms incomes, most of the workers I interviewed rented land from households in nearby non-YSF villages on which they planted their own rubber or tapped villagers' own trees periodically. When I asked the leader of Mrs. Zhou's State Farms branch how widespread this practice was, he said it was very common, but described it in almost boastful terms. The teenagers in the nearby Dai village loved to drink and weren't good workers, he explained, so they were happy to let the hardworking State Farms employees tap their trees. But Mrs. Zhou and the other workers I interviewed shook their heads at this explanation. The branch leader was good saving face in his answer, but really finding outside work was a necessity,[32] they insisted, if a family wanted to make any purchases beyond the most basic needs covered by their State Farms salaries and benefits.

2.4 "A fatty piece of meat": Reforming the State Farms System

When she was appointed the Party Secretary for their branch at age 48, Mrs. Zhou was already looking forward to retiring in a few years. She and her husband's hair had turned grey and their son had graduated college and moved to Kunming, the capital of Yunnan Province, to work as a car salesman. But the reforms changed her plans completely. The stated aim of these reforms was to solve the problem of State Farms workers' low salaries and the cost to the State Farms for running a social welfare system parallel to that of the state, while also making rubber production on State Farms more efficient and cutting down debt (Yunnan Provincial Party, Yunnan Provincial Government, 2009, Opinion No. 19). But these purported objectives were pursued at the expense of workers' job stability and by putting their welfare in the hands of the market.

By the end of the 2000s, enacting major reforms to the YSF system was considered an imperative by the Yunnan provincial government and YSF leaders alike. Discontent was brewing among both current and retired YSF workers over their lack of

[32] *Bixuyaode* 必须要的

access to the ballooning wealth being accumulated in the rubber sector despite their families' central role in the sector's establishment. Workers were increasingly speaking out by going to State Farms management and relevant government offices in Jinghong to file official complaints,[33] especially as rubber prices began to rise in the 2000s. On 21 January 2009, over 1,000 workers went to the Xishuangbanna Regional and Yunnan Provincial government, protesting for improved incomes (Zhang 2012). YSF was also deeply in debt as a result of growing pension obligations, inability to expand, poor investments made by YSF leadership, growing competition from private sector actors entering the sector, and a number of other factors.

After nearly a year of deliberation, the Yunnan Communist Party along with the Yunnan Provincial Government issued a report on the state of the YSF system and recommendations for reform in December 2009. The reforms shifted a number of State Farms assets and social welfare responsibilities to the state and transformed workers from state employees to contractors. YSF rubber factories and other major assets were placed under local state jurisdiction, which in turn meant that most local states sold the factories to private investors to cover the State Farms' debts. In return, local states became responsible for infrastructure repair and provision in State Farms residential areas.

As for workers, proponents of the reforms believed, in the context of booming rubber prices, that marketizing worker incomes would both encourage higher productivity and raise worker incomes. The reforms transformed workers into independent contractors. They were still responsible for the same plots they had worked previously, but they were not assigned production quotas, were free to sell their latex to any processor, and entitled to all of the income from sales in lieu of their formerly set salary. In return, they were expected to pay fees for all of their own social welfare benefits (medical insurance, retirement fund contributions, etc.) along with a resource fee charged for the privilege of tapping the State Farms' trees. Technicians no longer checked the quality of tapping, nor did YSF provide services for treating disease or inputs like fertilizers. Workers were therefore independent in the sense of managing their own tapping and sales of latex, though the plots of land and the trees they worked remained under YSF ownership. When I asked why the land and trees were not privatized, the head of the Mrs. Zhou's YSF branch replied, "the trees are a national resource,"[34] and that with a resource as strategic as rubber, privatization of the trees themselves is not an option.

At the start, due to high rubber prices at the time, workers' incomes increased from $1,417 yuan in 2009 to $1,932 in 2010. Workers throughout the YSF system tapped their allocated trees to exhaustion in order to take advantage of high prices, as well as to make up for the fact that their social welfare benefits payments rose drastically after the reforms. Mrs. Zhou calculates that 75% of her salary now goes to medical insurance and related payments, and she's paid at a higher rate as an office worker than her husband who faces similar costs. In order to cope with higher social welfare payments, many contracted workers refuse to pay resource fees to the State Farms and there was (and

[33] Referred to in China as *shangfang* (上访) and also be translated as an in-person petition. This type of political action can also referred to as *xinfang* (信访) and translated as "Letters and Visits" (Gao & Long, 2015).

[34] *Guojiaziyuan* 国家资源 national resource

remains) little practical recourse to this for the State Farms. "Before, the money was in the hands of the [State Farms] enterprise," explained one State Farms worker I met at a latex collection station, "now it's in the hands of the people; it was much easier to control the quality of production before. They [State Farms technicians] would take huge cuts of your salary if you didn't tap well, if there was damage to the trees. There's no way now for them to take the same cuts, so all the trees are damaged." This was repeated by most of my interlocutors on the State Farms and Mrs. Zhou echoed the sentiment: "Completely destroyed! The reforms let the State Farms' resources all go to waste."

What cemented Mrs. Zhou's negative assessment of the reforms and the fate of State Farms workers was a dramatic drop in rubber prices which hit Xishuangbanna in 2013.[35] With salaries completely dependent on income from latex sales, YSF workers were heavily affected. They began to struggle to pay their own insurance, school, and pension fund fees with their shrinking incomes from latex, and the State Farms have given up on collecting resource fees for their rubber plots. Meanwhile, because rubber remains categorized as strategic and because they do not own the trees or land they work as contractors, State Farms workers are limited from converting rubber to more profitable crops, such as fruit trees, and must continue in rubber despite low market returns.

Since then, Mrs. Zhou and her husband have scrambled to make ends meet. Her son began to provide them payments when he could, but their meagre savings after a life of modest salaries were rapidly diminished and she worried about retirement. To emphasize the seriousness of her situation, Mrs. Zhou described a conversation she had with a friend who lived in Kunming. Her friend worked in a fast food restaurant and, thinking the salary was not bad compared to her and her husband's income since the reforms and the rubber price drop, Mrs. Zhou had asked her friend what she would need to do to get a job there.

"*Bie kaiwanxiao*! Don't kid!" her friend retorted. "You're a state worker,[36] you have a much more stable position than me, why would you stoop to waiting tables? How embarrassing."

"I'm serious!" Mrs. Zhou replied to her friend remorsefully. "And it's the State Farms who should be embarrassed. If I want to pay my bills, I'm going to have to find outside employment!"

When I asked her in summary what the future of the State Farms would be, Mrs. Zhou shook her head angrily. "The reforms are a failure" she declared with a bang of her fist on the table. "The state took it all away with one word, they paid us nothing!" she exclaimed, referring to the devolution of her branch's processing factory to the local state. "We [YSF] are just a fatty piece of meat to the state, everyone wants a piece, so they took away our assets with one word – our factory, our benefits, our schools – and now they say these belong to the state, not to us. Now we are left to grovel at their feet."

[35] Global rubber prices dropped at the end of 2011, but it did not affect XSBN until 2013 because processing plants were still competing with each other for product by keeping prices high, and many factories likely had purchasing agreements with the state or other buyers set at the higher previous price levels and so were still buying at those rates.

[36] *Gongwuyuan* 公务员 can also be translated as 'civil servant.'

In her formulation and that of a number of both retired and current workers I spoke to, depicted the state as forcing the reforms upon them. By increasing worker vulnerability to the market, which crashed just as changes took place, the reforms have, in Mrs. Zhou's view, broken the state's commitment to State Farms workers and betrayed their contributions to the nation. The reforms therefore failed in their view because they neither delivered benefits to the workers, nor did they improve the system of rubber cultivation on the plantations.

Academics in nearby research institutes and an expert in the Tropical Crops Research Center (the former research branch of the State Farms but separated in the early 2000s) represent the reforms as being aimed at improving State Farms workers' household incomes, but more importantly as a step toward updating the antiquated system based on communist ideals for a more market-oriented economy. Another retired worker who was involved in the 2009 protests, but had never gotten a contract, sees the reforms as a move to simply increase State Farm profits at the expense of their workers. In his view and that of Chinese rubber researchers I interviewed, the reforms failed in part due to poor design given the timing of rubber price fluctuations.

2.5 Neither Public Servants nor Rural Farmers: The Ultimate Contradiction

My friend Zhanglin is in her mid 30s like me and grew up in a village of smallholder rubber farmers down the road from the State Farms area where Mrs. Zhou lives. She calls Mrs. Zhou her godmother because Zhanglin's father was one of the few local Hani[37] who worked on the State Farms; Mrs. Zhou and he had been close when he was still alive. "The difficulty for my godmother," Zhanglin reasoned, "is that she and the other State Farms workers are *youbugong*, *youbunong*: neither public servants nor rural farmers."[38] In practical terms, they lack access to the benefits of working for the state, which usually includes lower but more stable pay than workers in the private sector enjoy, while also not qualifying for the state services such as public health insurance and poverty alleviation programs sweeping rural China in the last decade.

The precarity of Mrs. Zhou's position as neither a public servant nor a rural farmer was evidenced by the disparity in their living conditions. In contrast to Mrs. Zhou's one-room home with a small courtyard in the State Farms complex, Zhanglin's family had constructed a three-story structure overlooking their village's residential area and the hills of pea gardens, bananas, and rubber beyond. Her brother and his wife support their three children and Zhanglin's mother all by tapping the rubber their parents had planted a few decades before, and with sporadic income from renting their few lowland plots to banana farmers and whatever Zhanglin could contribute from her salary working for a Beijing based charity organization. She and her siblings had all pitched in and construction of their family home had begun during the period of contagious optimism when the rubber prices were still high. At the time, the family enjoyed the subsidized cost of construction materials as Xi Jinping's administration has also promoted a series of "poverty alleviation" initiatives in remote rural regions like

[37] The dominant ethnic minority group in this region of Xishuangbanna.

[38] 有不工，又不农

Xishuangbanna. These subsidies encouraged Zhanglin's family and all of their neighbors to build; the village is now crowded with multi-story concrete homes.

Poverty alleviation is, indeed, at the forefront of Xi Jinping's rhetoric and initiatives for promoting domestic development. But subsidizing construction materials may be partially driven by the construction industry's being the most bloated of all the strategic sectors in China. While the number of SOEs in construction has dropped drastically, construction remains the primary consumer of strategic raw materials (such as steel, iron, and concrete) and employs a huge force of labor which the state sees as a tool for political stability. I point this out merely to clarify that I see state subsidies for construction materials in Zhanglin's village as important, not necessarily for the material impacts they have on the living conditions of Zhanglin's family and those of her neighbors, but rather in the way that their material improvements contrast Mrs. Zhou's living situation and the way this difference is read on both sides as dramatizing the state's abandonment of YSF workers. Homes built with the help of state subsidies across Xishuangbanna are given Chinese flags to fly at their gates upon completion. According to state slogans, these flags are meant to symbolize that the area had successfully eliminated or 'struggled against' poverty[39] (see Figure 1 below; Interview, Xishuangbanna, Oct 2017). YSF workers do not qualify for these subsidies, or for a range of other state services aimed at poverty alleviation in Xishuangbanna, because they are categorized differently from local residents.

Figure 4. National flags are posted outside homes built with state subsidies granted to households in Xishuangbanna (which typically have blue tile or corrugated iron rooves) designated as 'poor' as an indicator that poverty has been alleviated (Xishuangbanna, Author, May 2018)

Mrs. Zhou and other workers' testimonies decrying State Farms reforms often focus on how the new system fails to treat them in ways that reflect how they have always seen themselves: as model citizens, bringing prosperity and state-backed stability

[39] *Baituo Pinkun* 摆脱贫困 or *Douzheng Fupin* 斗争扶贫

to the unruly, backward borderlands. This subjectivity of a model citizen, as I have discussed, is not an ethnically or politically neutral one, but is shaped by a much longer history of state moves to secure the nation's purportedly unproductive and unruly southern landscapes through the labor and settlement of Han workers from other regions.

When I spoke with workers on and off the State Farms, ethnic difference was often presented as a measure of work ethic and relationship to the state. Interlocutors in Zhanglin's village, virtually all of whom are Hani rubber smallholders, communicated a parallel distrust of YSF workers (majority Han). Each group told competing narratives about the others' alleged foibles. Independent minority rubber farmers in Zhanglin's village, for example, told me colorful stories of State Farms workers getting preferential prices for their rubber latex or secretly using additives to cheat latex quality tests thus retain their market advantage over local communities. YSF workers, meanwhile, describe local smallholder rubber farmers – the vast majority of whom are members of ethnic minority groups, a point always made by my State Farms interlocutors– as drinking away their proceeds from rubber and only tapping when they've run out of funds, suggesting they are undeserving of their access to land which State Farms workers have to rent from them just to get by. These same workers repeatedly emphasize their parents' contributions as liberators of the region who were specially selected from their home regions based on, according to Mrs. Zhou, their loyalty to the state and their ability to "eat bitterness."[40] These are all characteristics entwined with their status as either Han Chinese or as the select elite of their respective ethnic groups, the few who were deemed worthy of State Farms work, in contrast to local ethnic minority groups.

2.6 Conclusions

This chapter has highlighted several fundamental shifts in the state's relationships to rubber as a strategic resource, to the borderlands of Yunnan as a frontier of state territorial formation, to YSF workers, and to capitalist markets. Over the three post-revolution periods since the founding of the People's Republic of China, rubber shifted in the manners in which it was strategic to the Chinese state. Initially, rubber served as an effective tool in the process of Chinese state territorialization. It transformed landscapes from locally managed forests to state owned plantation land, and at the same time legitimized and served as a mechanism for the resettlement of Han Chinese into areas dominated by ethnic minority groups. This established and strengthened CCP rule in a region distant from Beijing and dominated by another set of rulers – the lowland Dai people. The borderlands thus shifted through rubber as facilitator: as state formation proceeded and Han Chinese filtered into southern landscapes, the State Farms were established and would eventually (starting in the 1980s when rubber was promoted beyond the State Farms) facilitated the integration of Xishuangbanna minority groups

[40] 吃苦 *ChiKu* or 'eating bitterness' is a central concept in the self-understanding of Han Chinese throughout history of being particularly hard working and willing to withstand harsh conditions. It is invoked as a measure of their '素质' *SuZhi*, their quality, always in comparison to lower quality citizens who are deemed less hard working, less loyal to the state, and less sophisticated or modern. The term's centrality in Chinese culture and its parallel utility in disciplining Chinese labor has been widely researched, see for example Loyalka (2012).

into the transitioning Chinese economy. By the 2000s, YSF no longer served the same territorial purposes. They were not needed to integrate the region into the nation's political and participation in rubber had been readily taken up beyond the State Farms plantations. Once these processes of state territorialization were sufficiently stable, Chinese State Farms workers became expendable assets – an increasingly precarious class of landless citizens reliant on a less and less state-supported economic institution.

By situating the contemporary accounts of workers within the longer history of State Farms formation and reform, this chapter reveals the flexibility of the designation of rubber as strategic and its utility as a tool for legitimizing shifting state interventions in the rubber sector. While various actors involved in rubbers production and promotion may treat the category of 'strategic resource' as fixed and immutable, my analysis demonstrates that this concept is far from static. Rather, the construction of rubber as a strategic resource is historically contingent and malleable, run through with changing state political interests, market fluctuations, and racialized formations. In workers' varied interpretations of the reforms and the contradictions that the reforms reveal, different actors appear to compete over, position themselves in relation to, and animate, through their own narratives, rubber's status as 'strategic.' Furthermore, the relationship between Chinese state interests in the border regions of southern Yunnan and its support for and involvement in governing the State Farms system is inconsistent.

Yet my research also shows how State Farms remain important to articulations of Chinese state interests, even as they shift. The state continues to exercise significant influence over YSF and, in turn, YSF is heavily reliant on policy support to function. In my interviews with frustrated state workers, however, there is a change in how they conceive of their allegiance to YSF and the benefits of state employment. Now, they are likely to retain their claim to separation from state interests in ways that suggest the State Farms and the state are constantly negotiating the conditions of their cooperation, rather than working as one to better the nation. Workers try not to get lost in this constant negotiation, and instead, position themselves as linked to, indeed constitutive of, the State Farms and separate from the state.

Meanwhile, the future of YSF and the Chinese rubber sector seems to be moving beyond the border. The reforms have strained the long established relationship between workers and the YSF system and also signal pressure on the YSF system by the Chinese state to find other ways to expand and accumulate. The following chapters will demonstrate that rubber's importance to national interests has not waned. It is no longer rooted in the territorial function of rubber and the drive for domestic self-reliance and is instead increasingly tied to the new project of expanding and securing control over a transnational rubber production network.

3 From Backwater to Bridgehead: Opium Replacement and the Sub-National Drivers of Rubber Investment

3.1 Introduction

One of the first tasks the CCP undertook upon coming to power in 1949 was the eradication of opium. The Kuomintang and the CCP had both used the opium economy to finance their military efforts throughout prior decades, first while fighting together against Japan (1937-1945), then while fighting each other during the ensuing civil war (1945-1949). In 1950, however, the year after the CCP won the civil war, Mao Zedong labelled the drug a 'capitalist vice' and a tool for suppressing the Chinese people throughout history (Andreas 2019, pp. 162-163).[41] In the name of the ongoing struggle against capitalism, addicts were rounded up and placed in labor camps, traders and dealers were sentenced to death, and opium fields across Yunnan were destroyed. The CCP declared the country opium-free in 1956 and trumpeted this achievement as one of the first demonstrations of the Party's might and governing legitimacy (SACU 1977). Yet opium cultivation in the region did not merely disappear. Instead, production increased just over the Yunnan border in the uplands of northern Laos and Myanmar. There, opium cultivation has survived over half a century of eradication efforts and remains a key livelihood for small farmers and a massive revenue source for a network of ethnic political groups and narco-elites in Myanmar (Woods, 2011, 2018).

When Yunnan's borders were reopened to trade in 1988, however, Chinese opium consumption and its lucrative trade from the Golden Triangle[42] into the province rebounded. The fact that Yunnan has resumed its position as a market and transport hub for opium is regarded by Chinese officials as nothing short of a "serious threat to stability in border areas of the province, economic development, and national security" (YNADA 2011) and "a vital matter regarding the rise and fall of our nation" (President Jiang Zemin, 1990, cited in Su 2015, p. 79).

In 2004, in response to the revival of the opium trade and a resultant rise in domestic opiate use, the central government in Beijing established a committee tasked with designing and implementing the Opium Replacement Program (ORP).[43] Like the

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[41]Mao's characterization of opium as a tool for suppression was a reference to the Opium Wars between 1839-42 when the Qing Dynasty repeatedly lost in its efforts to avoid opening ports to European powers and granting them favorable trade concessions. The Opium Wars were a watershed in the downfall of the Qing Dynasty and thus the country's long history of dynastic rule.

[42]The Golden Triangle refers to the region where Thailand, Laos, and Myanmar meet. Opium cultivation thrived throughout the region until the 1970s and primarily supplied Yunnan and markets whose trade routes ran through the province. But at this point in 2020 Myanmar is the top producer in the region by far and opium cultivation is close to eliminated in Thailand. The Golden Triangle is the second highest opium producing region in the world after the region referred to as the Golden Crescent centered in Afghanistan.

[43]A commonly used longer name for the Opium Replacement Program is 境外鸦片替代种植项目 or "Borderlands Opium Replacement Crop Program." Another translation for 替代 (*tidai*), the Mandarin Chinese word for "replace," is "substitute," thus some translate the name accordingly.

illicit[44] crop substitution and alternative development initiatives of the United Nations and other international aid organizations, the ORP aims to end the opium trade by reducing its production and supply. Specifically, the ORP follows a crop substitution approach, aimed at increasing farmers' access to licit livelihood alternatives as a way of drawing them out of opium cultivation. Comparable programs run by not-for-profit aid and state development organizations typically conduct small-scale interventions with opium producing households or villages. In contrast, the ORP provides a range of financial and administrative support mechanisms to create incentives for agricultural investors to establish operations across the regions of northern Laos and Myanmar where opium has been cultivated (Cohen 2009). The ORP is the most commonly cited Chinese policy motivating Chinese agribusiness investors I interviewed in Laos, and the majority of participating companies listed on public registers of ORP investments focus on rubber production.

In this chapter, I examine the stated policy objectives of the ORP at the central level in Beijing, the processes through which it was designed at the provincial level in Yunnan, and the ways it has been implemented in Laos. As a departure point for my analysis, I take up common criticisms of the program as having been implemented in ways that contradict the stated policy objective of eradicating opium. Specifically, I focus on the assertion that ORP aids for-profit Chinese companies in the name of development cooperation while driving a boom in rubber – a crop not typically promoted by other opium substitution interventions due to its contrasting production cycles, market characteristics, and physical growing conditions to opium.

I then analyze how political stability in the borderlands – to which rubber was central in Yunnan, and which the rise of opium threatens – intersects with processes of Chinese state decentralization and the role Chinese investors have come to play in facilitating cross-border development interventions. I argue that criticisms of the ORP read the Chinese state's aims around opium eradication narrowly, missing the political implications of opium crop substitution – specifically by rubber – for Chinese ideals of development and stability in the country's border regions. Furthermore, I show that many aspects of how the ORP was designed and implemented reflect differences between what different levels of the Chinese state hopes to achieve through border region development and political stabilization. I argue that, whereas the central state in Beijing established the ORP based on concerns around opium as a force of political destabilization, Yunnan province leaders have used the ORP to assert their authority over cross-border investment, trade, and development cooperation. The ORP and corresponding expansion of rubber into Laos have thus assisted Yunnan's shift from a remote underdeveloped backwater, to a dynamic 'bridgehead'[45] or hub for China's integration with mainland Southeast Asia.

I begin by reviewing the literature on the role of sub-national state interests in China, particularly of the Yunnan Provincial government. This includes a description of

[44]Because formal regulation of opium cultivation has changed over time and differs across countries, I use the terms illicit and licit, which are broader and less specifically tied to legality than the terms illegal or legal.

[45]The term 桥头 (*qiaotou*) in Mandarin most directly translates into English as 'bridgehead' but could also be understood as 'gateway'.

the ways China's domestic development path – particularly decentralization and core-periphery dynamics – shape outflows of Chinese investment and the ways in which China's expansion beyond its borders is conceptualized and analyzed by other scholars. I trace the transformation of Yunnan from a backwater periphery to an increasingly strategic bridgehead for the Chinese state. I discuss how this transformation has been shaped by tensions between Yunnan province and the central government in Beijing over how to govern rising cross-border economic activity in the decades leading up to the establishment of the ORP. I then examine how China's broader concerns for social stability, borderland security, and development, underwrote the establishment of the ORP and the central role rubber has played in its implementation despite rubber's poor fit as an alternative to opium. In the following section, I outline how the ORP was designed and implemented, after its initial approval and establishment at the central level, by the Yunnan Alternative Development Association and its partners in the provincial level Ministry of Commerce. Finally, I describe the initial entry of ORP supported rubber investors into Laos, highlighting the perspectives of individual Chinese managers and a range of Lao state and local actors.

3.2 The Mountains are High, and the Emperor is Far Away

China underwent multiple rounds of decentralization in the 1980s in parallel with marketization reforms. These reforms devolved decision making authority and control over the flows of state finances to provincial state authorities. This process of decentralization has been particularly fraught and uneven in border provinces like Yunnan where, according to a Chinese proverb, "the mountains are high, and the emperor is far away."[46] The proverb alludes to a historical tendency for officials in the provinces farthest from Beijing to disregard or manipulate the commands of authorities in Beijing. A growing body of scholarship has emerged highlighting the important role of provincial authorities, specifically those in border regions, in governing China's global integration (Summers, 2013, 2016, 2018; Tubilewicz & Jayasuriya, 2015) with a particular focus on Yunnan's close links to Southeast Asia (Goodman, 2004; Summers, 2013). The devolution of authority to provincial leaders has taken on new significance since the "Go Out Policy" catalyzed a rise in Chinese investment beyond the country's borders. Provincial governments control many of the administrative channels governing Chinese capital flows out of the country and border provinces are home to many of the economic actors actively investing overseas, especially capital flows to neighboring countries like Laos. The country's sudden increase in global economic engagement in the 2000s is also inseparable from parallel processes of decentralization and shifting power relations and governing priorities between the central government in Beijing and the provinces. As a result, when it comes to understanding where, how, and why Chinese investment occurs in Laos, the role of Yunnan Province cannot be overstated.

[46]*Shangao, Huangdi Yuan* 山高,黄帝远

3.2.1 Governing the Yunnan Border

Yunnan is situated in China's Southwest and stretches from the Tibetan plateau in northwestern Yunnan to the sub-tropical jungles of the Xishuangbanna Dai Autonomous Region which border Myanmar, Laos and Vietnam (see Figure 5). The province is home to a diverse population of ethnic minority populations who were only loosely governed by Chinese rulers through tribute relations throughout history. In contrast, the people of Yunnan have long cultivated linguistic, trade, and religious ties to neighboring countries in mainland Southeast Asia (Rossabi, 2004, pp. 55-56). Since the Cold War especially, ties between Yunnan and Southeast Asia are consistently underestimated in their significance to flows of people, capital, and goods (Glassman 2005).

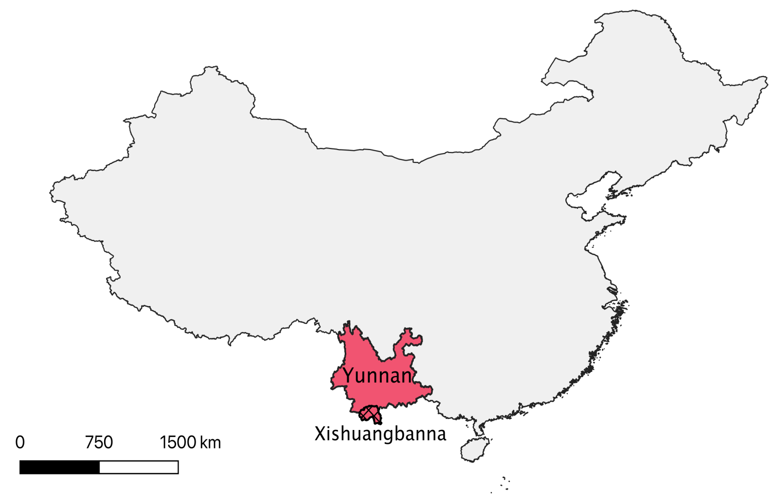

Figure 5. Map of Mainland P.R. China, Xishuangbanna Dai Autonomous Region and Yunnan Province

Yunnan has played a particularly important role in the formation of the People's Republic of China. It was one of the last strongholds of the Nationalist KuoMinTang (KMT) party, referred to as the KMT's 'great rear base,'[47] and the CCP was only able to drive them out of the province into Myanmar with the cooperation of local warlords (Summers 2013, 44-45). As a result, the CCP has long considered its authority over Yunnan to be tenuous and has therefore treated the political and economic integration of the province as a priority. But because of Yunnan's historical independence, its integration has occurred not through top-down assertion by Beijing but through careful negotiation between provincial leaders and the central state.

For the first few decades after the country's founding in 1949, Yunnan was considered politically unstable and the province's international borders (along with the borders of most of China's inland provinces) were closed to migration and trade. The closure of the border was not unique to Yunnan – Mao Zedong led China into increasing geopolitical and economic isolation from the world during those decades (see Chapter 2). At the time, the province was already relatively economically independent of the rest of China, with between 70-80% of goods produced within Yunnan sold within the province itself (Solinger, 1977, p. 69).

[47] *Daohoufang* 到后方

But the persistent view in Beijing of Yunnan's border as insecure was also a result of continued incursions by the 'lost army' of KMT troops who remained in Myanmar after their defeat to the CCP and launched periodic unsuccessful invasions into Yunnan's borderlands through the early 1950s. Additionally, Yunnan was a staging ground for other extra-territorial armed conflict. For example, after rising tensions with Soviet Russia through the 1960s and Soviet-backed Vietnam's invasion of Cambodia, Chinese troops invaded northern Vietnam in 1979 from bases in Yunnan and Guangxi, sparking an intense but brief border war (the Sino-Vietnamese war or the Third Indochina War) followed by decades of heightened border security on both sides. This escalation meant that the Yunnan border continued to be considered an area of national security importance through the mid-1980s.

Throughout these decades of ongoing yet dispersed unrest, the state leveraged territorializing strategies such as the expansion of rubber plantations through the Yunnan State Farms system (see Chapter 2), the heavy-handed but swift extirpation of the opium trade, and state sponsored in-migration of Han Chinese from other provinces, served to extend and strengthen CCP control in Yunnan's border areas. When China launched economic liberalization reforms under Reform and Opening in the 1980s, Yunnan's economy was stagnant relative to that of eastern and central provinces, and its role within the national economy was emblematic of a peripheral region (Wallerstein 1974). Yunnan supplied raw materials, from timber to rubber to tin, to the booming eastern provinces which were rapidly transforming into industrial and manufacturing centers under Reform and Opening. The raw materials extracted from Yunnan were sold through state purchasing channels at highly controlled prices and finished products were shipped back to the province from the east, cementing Yunnan's underdeveloped status in these unequal terms of trade (Donaldson 2000 p. 147; Yang 1997 cited in Summers 2013, p. 56). But with Reform & Opening came an increasing interest in the development opportunities posed by increasing international trade, even if the borderlands were still perceived as unstable.

In line with the Reform & Opening policy, a number of central government regulations established in the mid-1980s loosened central control over border trade and devolved authority over border governance to provincial authorities across the country. In 1985, the State Council[48] granted Yunnan permission to establish border trade zones with Myanmar and Laos (Yang 2001, p. 26 cited in *ibid*, p. 149) under the National Autonomy Law and the related 'Provisional Regulations on the Administration of State-to-State Border Trade,' which devolved considerable responsibilities and opportunities around managing cross-border trade to provinces (*ibid*, p. 148). Yunnan provincial authorities subsequently established their own agreements directly with leaders of bordering sub-national authorities in Laos and Myanmar around cross-border trade regulations and initiated minor aid and infrastructural improvement projects. From 1985-1992, Yunnan's trade dependency ratio reached one of the lowest in the country and its border counties showed the most significant economic growth across the province, indicating the potential for border trade to fuel development in Yunnan.

[48]The State Council constitutes the central legislative branch, one of three governing branches of the central government of China, the other two being the China Communist Party (CCP) and the People's Liberation Army.

Overall, migration and licit trade activity across Yunnan's international borders has steadily increased since its opening in the early 1980s, but authority over border governance has divided between the provincial and central state. Tax exemptions for imported goods have been the primary battleground. Provincial authorities governed most aspects with considerable independence after 1984 when State Council regulations granted them a leading role in establishing and managing borderland trade zones, and in 1992 those zones were expanded (Summers 2013, pp. 148-152). During this period, Yunnan authorities allowed for import tax exemptions on a range of products, but in 1996 the central government abolished a majority of these exemptions, limited the total volumes for which such exemptions could apply, and unified the country's trade tax regime thus channeling border tax revenues through the central government instead of straight into provincial revenues. Companies needed authorization to conduct cross-border trade, the distinction between 'border trade' and 'general import and export' (which is taxed more heavily) was clarified, and Yunnan's trade volumes plummeted as a result (Summers 2013).

Throughout this time, Yunnan provincial leaders lobbied Beijing heavily for greater power over border trade and for more preferential development policies. In the mid-1980s, leaders from a handful of provinces formed the Economic Coordination Association of Southwest China. The Association met yearly through the 2000s to coordinate development planning and to jointly lobby Beijing for more flexible border trade policies, greater provincial power in border governance, and more preferential development policies (*ibid*, 108). Economic liberalization and decentralization, as well as the use of economic growth metrics for the promotion of state leaders at all levels, also increased competition between provinces to attract both private and central state investment (Wang et al. 2007; Wei 2001; Yang 2012).

As the benefits of cross-border trade to Yunnan's economic development were becoming increasingly clear, so too were the accompanying risks increasingly apparent. Myanmar's opium production had expanded significantly through the 1980s. With this expansion, Yunnan's role as a hub for the opium trade was revived, and Chinese consumption began to shift from rural use in border regions to the rise of urban addiction in the 1990s (Xiao et al. 2007, p. 667). Injection drug use, primarily of heroin, was responsible for the first incidents of HIV/AIDS in China, which surfaced in Ruili – a cross-border trade hub in Yunnan close to Myanmar – in 1985 (Qian et al. 1998). Two state institutions were established to lead China's fight against the influx of opium, one at the central level and one at the provincial level. The Yunnan anti-drug police force, established in 1982, was charged with halting the drug trade at the border, arresting traffickers and confiscating drugs (Su 2015, p. 78). A central level counterpart, the National Narcotics Control Commission headed by the Minister of Public Security and consisting of participants from 25 different ministries in Beijing, was then established in 1990 to engage in greater international cooperation with relevant anti-drug agencies in neighboring countries and international aid organizations (*ibid*). Despite these efforts, the opium trade from the Golden Triangle into China continued to grow and in 2004, in parallel to the ORP's establishment, then President Hu Jintao declared a "people's war on drugs" (Xinhua News Agency, 26 May 2005 cited in *ibid*, p. 76). All of these factors served to encourage Yunnan's leaders to seek economic opportunities through policies more favorable to cross-border trade at the same time as they needed to assuage the central state's concerns around border security and social stability in the province.

3.2.2 Western China and Global Integration

As Yunnan's leaders navigated the balance between national security concerns and the promise of development through cross-border trade, the country's broader political and economic structures were also changing. After decades of heavily skewed state and foreign direct investment in the Eastern coastal provinces, the national economy had begun to grow rapidly but dramatic inequality in living standards divided the regions. To address this, the central government launched the Open up the West[49] campaign in 1999, encouraging greater investment and state programs targeting growth across Western provinces including Yunnan. The same year, President Hu Jintao announced the Go Out[50] strategy which brought down barriers to trade and investing overseas and encouraged enterprises to expand abroad. The two campaigns have distinct stated policy objectives, with Open up the West aimed at improving economic inequality between regions in China and Go Out at reducing barriers to global economic expansion. Despite these distinctions, a number of scholars have analyzed the two initiatives as intricately linked – as produced by the same problem of overcapitalization in the Chinese economy and the need for a spatial fix, one through a domestic move West and one by investing capital abroad (Glassman, 2010, p. 117; Klinger & Muldavin, 2019; Summers, 2016; Yeh & Wharton, 2016). Viewing the drivers of the two policies together reveals this moment at the turn of the 20th century, when the ORP also emerged, as an important juncture in China's shifting political and economic approach from domestically focused to globally ambitious.

The Open up the West and Go Out campaigns alike provide new outlets for the considerable capital accumulated on China's east coast. As such, they serve as mechanisms for "leveraging geographical unevenness for precise forms of economic and geopolitical gain" Klinger and Muldavin 2019, p. 8). Reform and Opening had allowed for considerable increases in per capita income in eastern China but the country's inland regions remained comparatively underdeveloped. On one hand, this presented the opportunity for considerable growth by drawing inland the capital accumulated in eastern China, to improve infrastructure and tap into cheaper labor markets, extract resources, and build domestic market demand for the manufactured industrial goods being produced. On the other, it raised fears in Beijing of the political implications of regional inequality (including a documented rise in demonstrations of popular discontent), particularly considering the concentration of ethnic minorities in less developed regions of Western China (Glassman 2010, p. 117). Directing state resources and investment capital towards these provinces was expected to underwrite a larger political project of establishing a new sense of national unity, stabilizing and integrating minority-dominated regions through infrastructure development and market links, and strengthening the state's territorial control and evening out its territorial integrity (Goodman, 2004).

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[49] *Xibu Da Kaifa* 西部大开发, also referred to as the "Go West" or the "Develop the West" campaign.

[50] *Zouchuqu* 走出去, also sometimes translated as "going out"

The Go Out policy, in turn, reversed decades of policy limitations on overseas investment and encouraged Chinese enterprises to invest overseas (Salidjanova, 2011). Not only was this a reaction to the overcapitalization of the economy and the need for new markets and trade links, but the 1997 Asian Financial Crisis served as a warning of the need to diversify away from China's heavy dependence on export-led growth. The policy also established specific roles for province level authorities in facilitating overseas investments. A number of border provinces were designated as 'bridgeheads' or hubs for international trade, finance, and information flows (Su 2013). 'Bridgeheads' were responsible for coordinating investment and, to a lesser extent, foreign relations with neighboring regions. Yunnan was designated China's bridgehead to Myanmar and Laos, with a more vaguely established responsibility for connecting across the Mekong Region and even with South Asia (Interview, Kunming, August 2014; see also Summers 2016, 1634). The Asian Development Bank had also initiated extensive road and other infrastructural development under the 1992 established "Greater Mekong Subregion" program aimed at establishing infrastructure for better connecting Yunnan to neighboring countries in the upper Mekong Region (Walker, 1999). These developments placed the Yunnan provincial government in charge of overseeing administrative services (such as registering foreign branches of a company or approving import/export licenses) for a significant amount of Chinese investment in Laos. Yunnan's economic development and history of land and resource governance thus shaped the forms of Chinese investment in Laos encouraged, structured, and justified by Chinese policymakers and other proponents.

Summers (2016) has suggested China's global integration be seen as "an extension, consolidation and political elevation of pre-existing policy ideas and practice at the sub-national level in China" (p. 1634). Or, in more explicitly spatial terms, Klinger and Muldavin (2019) call the Go Out Policy "the international counterpart to the Great Western Development strategy … a westward dynamic on a transnational scale, wherein capital, infrastructure, investment and governance norms" emanate out from China in to the world (p. 9), thus describing China's global integration as a process of "extending the natural resource hinterlands of China." The mantra of global expansion also constituted a new organizing force around which the country's political and economic priorities were being realigned. State institutions in Yunnan province had much to gain in terms of expanding their authority by positioning themselves in a role of facilitating transnational flows of Chinese capital into Laos and the rest of the countries it borders.

3.3 Establishing the Opium Replacement Program

The ORP was established at a time when domestic state projects and the process of global expansion had become intertwined. These projects, described above, brought the interests of different state actors, particularly leaders in Yunnan and Beijing, into tension. As such, the ORP should be treated not simply as a policy aimed at one objective of a unified Chinese state – be it the officially stated goal of reducing opium cultivation, the commercial interests of participating agribusiness investors, or the authority of Yunnan over China's engagements in Southeast Asia which it also serves – but at multiple intersecting objectives across different levels. Although an administrative structure headed by a specially appointed Working Group was established for the ORP by the central level State Council in Beijing in December of 2004, it was originally initiated and piloted at the province level in Yunnan years before.

The purposes of the ORP as stated at the central level were strictly centered on opium replacement and regional security through development cooperation, whereas its structure and design at the province level served to translate the initiative into a mechanism for commercial support. I argue that this was an outcome of the convergence of the central government's simultaneous search for a spatial fix for its increasingly overcapitalized economy and for ways of stabilizing Western China and the borderlands. As such, the ORP is better understood as a project that combines the Yunnan Provincial government's drive to redefine its role as a hub for cross-border trade, investment, and development cooperation[51] with mainland Southeast Asia, with Chinese agribusiness companies' desire to take advantage of a newly opening, state-subsidized frontier for investment.

Long before the State Council established an opium replacement Working Group in 2004, Yunnan agribusiness investors were drawing upon discourses of opium replacement and border security to characterize their ventures into Myanmar and Laos. Chinese state restrictions on cross-border trade were slowly reduced through the 1980s and 90s. Cross-border investments were further incentivized by the Asian Development Bank's Greater Mekong Subregion project, established in 1992, which funded road and other infrastructural construction in the area (Walker, 1999). While it is unclear who first made the connection, there are references as early as the mid-1990s referring to these agribusiness investments as opium reduction efforts. Su (2015) credits the Yunnan provincial government with pushing a precursor to the ORP in the 1990s, translated as the "Green Drug Prevention Plan." He et al. (2006, 32), in contrast, suggest Chinese companies themselves modelled the approach the government programs would later reflect:

> A few years earlier, some Chinese companies engaged in trade along the border with Laos and Myanmar and accumulated a significant favorable balance of trade. Because those on the other side lacked the money to pay, they used land as collateral. On this valuable land, which couldn't be converted directly into cash, the Chinese companies planted cash crops and, through employment with these companies, local opium smokers gradually abandoned opium cultivation. As a result, China's borderlands opium substitution scheme was really not initiated with the clear purpose of directly instituting substitution activities, but spontaneously originated from companies seeking their own profit through economic activities.[52]

For my purposes, it is less important whether the provincial government or investors themselves initially framed agribusiness investments as opium reduction schemes and more important how this allowed various actors in Yunnan to tap into fears of borderland insecurity. Yunnan still had a peripheral political and economic position in the 1990s, as

[51]The Chinese term 发展合作 (*fazhanhezuo*) is used to refer both to foreign aid, projects which fit traditional ideas of development aid (not-for-profit interventions in infrastructure, public health, etc.), but also to commercial investments like Chinese rubber plantations in Laos. I use the direct translation 'development cooperation' to distinguish between Chinese approaches to aid from those of traditional development aid donors. A number of scholars have discussed the contrasts between Chinese development cooperation and traditional aid including Li et al. (2014), Gonzalez-Vincente (2017, Buckley (2013), Power & Mohan (2012), De Bruyn (2013), Smith (2011), Walz et al. (2011) and Scoones et al. (2013)
[52]Translated by author.

one of the country's most underdeveloped regions, leaders in Beijing increasingly scrutinized the rise of HIV/AIDS and opium consumption in Yunnan as a symptom of instability brought on by the rise in cross-border activity. Simultaneously, through the Open up the West and other development initiatives, Yunnan received central support for development programs and was preparing to take on a larger role as a hub for China's trade expansion into Southeast Asia. Considering this confluence of factors, I interpret the depiction of cross-border agribusiness investments as opium replacement as a framing that served Yunnan provincial state and commercial interests alike.

By 2003, Yunnan's Green Drug Prevention Plan was already well underway. The Yunnan Department of Commerce reported that investors had established over 620,000 mu (41,000 ha) of what provincial officials referred to as opium replacement plantations and the initiative was gaining interest and traction in Beijing (Shi 2008). In 2004, the 122 Working Group, composed of nearly a dozen institutions but led by the Ministry of Commerce, was established by the central state and is charged with overseeing the Opium Replacement Program. The establishment of the 122 Working Group under the Ministry of Commerce instead of the national Drug Control Bureau marked a departure in China's history of opium control efforts. Su (2015) interprets this as a signal that the state had begun to consider more market-based approaches to the opium problem. The Group integrated objectives of opium cultivation control in Myanmar and Laos into a number of broader national policy objectives, from processes of border control to economic development and diplomatic cooperation planning in the Golden Triangle region. In 2006, the State Council established a Special Fund for ORP operations, providing 250m yuan (US$36m) for the first 2006-2011 period (Shi 2008, 23), and this fund was replenished with another 250m yuan for the 2011-2015 period (Su 2016, p. 17).

3.4 Designing the Opium Replacement Program

After the ORP was established in Beijing and its overarching aims – to replace opium cultivation with licit livelihoods generated by Chinese agribusiness companies and to secure the borderlands – were drawn out by the 122 Working Group, policy design and implementation occurred at the provincial level. Just as had been done at the central level, the ORP shifted from being the responsibility of the Public Safety Bureau,[53] a law enforcement agency, to the Department of Commerce[54] (Interview, Beng District, August 2018). Financial support from the Special Fund and administrative responsibilities was transferred directly to the Yunnan Province Department of Commerce, which has since continued to be the primary implementing agency of the ORP. The Yunnan Alternative Development Association is hosted by the Yunnan Department of Commerce and was established in 2008. Its members include representatives of the multiple state institutions involved in the implementation of the ORP as well as heads of participating Chinese companies. Companies are required to regularly report their production area, outputs, and a number of other details on a regular basis to the Association, though these numbers have only sporadically been made publicly available.

[53] *Gonganbu* 公安部

[54] *Shangwuting* 商务部

ORP support provided to companies consists of administrative help (e.g. easing controls on capital, supplies, and employee movement between countries) and financial incentives (e.g. low interest loans, subsidies for some establishment costs, and quotas for importing goods tax free) (Kramer & Woods 2012). These forms of support are explained in implementation orders established by the Yunnan Chamber of Commerce as necessary to offset the risk of investing in these areas, and to expand the scale of investments (YCC 2007). Any Chinese company could apply for ORP support, but in order to qualify for the ORP, companies had to establish branches in Myanmar or Laos, conduct feasibility reports, and obtain a range of formal permissions (including a business license and signed land contracts from their foreign counterparts) (Interviews, Long District, August 2017; Namtha District, August 2.2017). They needed documented proof that they had been granted certain minimum amounts of land (10,000 mu or 666 ha was cited by Shi 2008) in order to qualify. The support provided by the Yunnan Alternative Development Association, such as subsidies and quotas, was also loosely based on plantation area - the larger the plantation size claimed by the company the more subsidy support and quota allocation they could request. Banks in Yunnan were also heavily encouraged by the state to make low interest loans to the companies and paperwork affirming land access was key for loan approval as well (Interview, Kunming, December 2012; Su 2015, 79). As one Yunnan company representative succinctly explained of their investment in Laos, "the more you invest, the more money you get from the government," referring to subsidies and support provided by the Special Fund and distributed through the Yunnan Chamber of Commerce (Interview, Kunming, November 2012).

As a result of these qualification requirements, the vast majority of companies who qualified for ORP support were large, politically connected Yunnan-based companies. Companies with more modest capital reserves or ambitions for investment were effectively excluded because they lacked access to the necessary levels of capital. Of the 18 companies I profiled in my research, only three were not involved in the ORP, and those three each cited their lack of political connections and ability to access sufficient land in Laos to qualify as the main obstacle to their participation. I documented two common ways companies decided to participate in the ORP. Four of the 15 ORP companies I studied were already involved in agribusiness related operations in China had initiated ventures into Laos in the early 2000s (and many more had begun investing in Myanmar even earlier). Yunnan State Farms and one other company, for example, began exploring for land in Laos in 2001 and 2003 respectively, and Mr. Wen (see Introduction) was one of a handful of early trader entrepreneurs who had already been operating in Laos since the 1990s. These companies were established prior to formation of the 122 Working Group in 2004 but registered their existing projects once Yunnan's Department of Commerce established administrative procedures for doing so.

The majority of companies (11 of my 15 ORP cases) considered investing in Laos only after the ORP was established. Interlocutors often referred to investing in Laos as risky, with one investor describing the business environment in the country as "chaotic" and admitted that he only considered investing based on the incentives provided by the ORP (Interview, Oudomxay, July 2020). The same investor described being encouraged to apply by a friend in the township government where he lived in Xishuangbanna, and four other investors also cited personal contacts in the provincial, district, and township level Departments of Commerce at different levels recruiting them to invest in Laos and

Myanmar through the ORP. “I was basically sent out by the Simao township government” he concluded. It is common in China to design policy incentives around targets which subordinate state institutions are charged with filling, and the ORP was no exception. The Yunnan Department of Commerce was charged by the 122 Working Group with establishing 1million mu (66,666 ha) of ORP plantation in 2006 combined in Myanmar and Laos, with increasing yearly targets through 2010 for specific countries and crops subsequently prescribed (Shi 2008). These area targets were again devolved to district and township level Departments of Commerce, and many company interlocutors describe friends in these local commerce offices approaching them to encourage them to apply or at least actively helping them apply for ORP support (Interviews, Kunming, December 2017).

The emphasis on land area as the primary mechanism for assessing a company’s qualification for ORP support also had the effect of encouraging companies to seek as much land as they could conceivably be granted, regardless of their calculated management capacity (discussed in greater detail in Chapter 4). ORP supported rubber projects often hold contracts with the Lao state for planting 1,000 ha of rubber or more, and most of the companies that I focus on were granted between 2,500 and 10,000 ha by the Lao government.[55] Interlocutors interpreted the emphasis on area targets and resultant predominance of large-scale investments as rooted in the expectation that only large-scale operations could generate wage labor opportunities to a degree sufficient enough to impact opium cultivation and economic development noticeably. Both Chinese companies and Lao state interviewees explained that large-scale schemes were also expected to require greater infrastructure investments by companies, including road, electricity grid, and factory construction. “[The Lao government] should think how they can help sustain us and help us accomplish things quickly. Only when a foreign enterprise does a good job will the people’s living conditions be raised” exclaimed one plantation manager (Interview, Savannakhet, January 2013), echoing a sentiment expressed by many other Chinese investors interviewed. Lao government officials, similarly, explained that they often selected land located in poor communities deemed in need of corporate investment in order to develop. Village interlocutors also recounted being told that the Lao state selected areas of land in and around their village for allocation to companies based on poverty incidence, locating investments in poorer areas. Implicit in this logic is that smaller scale investments and extension services to individual smallholders could not provide such major capital investments as desired and deemed necessary.

3.5 Implementing the Opium Replacement Program in Laos

The establishment of the ORP catalyzed a wave of agribusiness investment over the Yunnan border. The vast majority of large-scale, formal Chinese rubber investors throughout northern Laos (and 15 out of 18 of my case companies) are supported by the

[55]These figures are based on their contracts with the Lao government. Many area estimates reported by the provincial and township Chambers of Commerce in China (the ORP administrating units) exceed those reported in Laos, likely because the companies and the supporting Chinese state institutions gain positive publicity for announcing high areas of land under ‘alternative development’.

ORP. The majority of these projects are located in Luang Namtha, Bokeo, Oudomxay, and Phongsaly – the four provinces in Laos bordering China. Approximately 89% of these projects were established between 2005 and 2008, and ORP rubber companies constitute between one and two thirds of all rubber companies registered in each province (GoL 2011). The projects have also, both through specific policy support provided by the ORP and by demonstrating interest in rubber, encouraged expansion by Lao farmers and other investors across northern Laos.

The ORP's implementation has evolved since its establishment, likely in response to issues in its design which Chinese implementation agencies have only quietly registered (Interview, Kunming, December 2013). In Laos, there have been considerable gaps between the plantation areas ORP companies report officially and the areas they have actually planted. In some cases, this gap results from a contractual over-promise of land by land-granting authorities in Laos. Other times, acquiring companies overstate their acquisitions in order to maximize their access to subsidies and other forms of ORP support, all of which are calculated based at least in part on the area planted as described above. One Chinese rubber researcher noted that her government contacts have received a number of reports of companies registering with the ORP but never developing plantations on the land they obtained, instead either logging their concessions and then disappearing (Interview, Kunming, December 2013). Multiple interlocutors I met in Laos, including Chinese company representatives and one Lao rubber farmer, recounted similar incidents (e.g. Interview, Beng District, July 2017).

By 2010, the Yunnan Department of Commerce put a halt to three aspects of the ORP – the approval of new companies, new areas, and new crops – referred to by company representatives as "three things not to increase."[56] Some interlocutors suggested that the Working Group in Beijing had decided to discontinue Special Fund payments. Others suspected that this was a response to complaints raised by a number of parties, most vocally Chinese companies who resented the advantages granted to ORP companies and not to others, of favoritism in ORP status granting process (Interview, Kunming, August 2014). They suggested that companies without political connections could not gain approval to participate, and that participating companies abused the benefits provided.

As a result of this criticism, the Yunnan Department of Commerce also engaged in an internal review of the program which included monitoring company investment activities (Interview, Kunming, December 2014; Shi 2008; Su 2015; Su 2016). Yunnan state officials have attempted to verify the size and location of plantations claimed by ORP companies using satellite imagery, but the GIS analysts at the Kunming Engineering College and the Southwest Forestry College tasked with this have struggled to execute this form of monitoring (Interview, Kunming, December 2012). Recently established plantations are difficult to distinguish from other agricultural plots (before tree canopy is established, when young rubber trees resemble annual crops grown), whereas mature plantations are difficult to distinguish from secondary forest (Li & Fox 2011). Furthermore, land contracts in Laos rarely provide georeferenced plot locations or plot maps, thus analysts cannot distinguish between a given company's claimed rubber trees

[56] *Sangebuzengjia* 桑哥不增加

and those planted by adjacent land holders (discussed in greater detail in Chapter 4). Finally, whereas companies may report their investments to the Chinese government in terms of total area invested in, rubber in northern Laos is not always established over large contiguous (and thus more easily measurable) areas but also across multiple plots and fragmented holdings (Shi 2008). One Yunnan academic I interviewed suggested that monitoring efforts became less of a focus after that initial effort in 2010 as rubber prices plummeted in 2011, plunging most of the participating ORP companies into financial distress despite ORP support.[57] In sum, the Yunnan Government has struggled to verify company investment activities, allowing ORP companies to operate with significant autonomy from Chinese state oversight in Laos.

3.5.1 Rubber: An Odd Alternative to Opium?

From both economic and ecological perspectives, rubber is not an ideal 'replacement' crop for opium cultivators. The two crops are grown on different types of land by different types of producers. Opium is typically grown at high altitudes (over 700 masl) by smallholders on small plots of marginal land, far from roads to avoid detection (UNODC, 2009), p. 40). Rubber under ORP companies, on the other hand, is grown at 900 masl and below, though is most productive below 500 masl (CCCMC, 2016). Chinese investors seek large, contiguous plots near transport and infrastructure. Rubber takes five to seven years to reach production stage, whereas opium is harvested after four to six months. Whereas rubber produced in northern Laos is almost exclusively exported to China, opium is both sold for export and consumed locally for recreational and medicinal purposes. Unlike rubber, opium is light and non-perishable, ideal characteristics for an illegal good which make it an easily transportable and flexible crop, profitable for farmers based far from markets and valuable enough that traders will travel directly to even the most remote farmgate to buy. Opium thus appeals to Lao farmers because it provides rapid returns while requiring limited resources invested.

Part of why rubber featured so prominently in ORP investing was because Chinese (and Lao) officials had already been promoting rubber as a profitable cash crop and Chinese investments in rubber as a form of development cooperation long before the ORP was established. Until the price drop in 2011, rubber was one of few lucrative cash crops grown in the region at higher elevations and on marginal, often sloping lands. Rubber was particularly appealing to Lao state officials because tree crops, even monoculture commercial plantations, are categorized as forest cover in both China and Laos, and the central Lao government has set ambitious reforestation goals toward which officials are keen to demonstrate progress (MRLG 2019). In China, rubber was credited with transforming Xishuangbanna, particularly in the areas bordering Laos (see Chapter 2), and Lao farmers I interviewed looked on in envy as their neighbors in Xishuangbanna bought motorbikes and built modern homes. Some villages in Luang Namtha had already adopted the cultivation techniques of their neighbors across the border (Hicks et al. 2009; Shi, 2008). Prior to 2011, rubber prices in the early 2000s were consistently strong, driving a planting frenzy in Xishuangbanna and buoying Chinese and Lao state optimism

[57]Many companies had taken out considerable low interest loans against their plantations, and the drop in the value of rubber left them unable to make payments.

that rubber could combat poverty and eradicate opium. Lao state officials promoted rubber not only as an alternative to opium, but as an answer to shifting cultivation needs and poverty alleviation (Cohen, 2009; Lyttleton, 2004). As such, Diana (2008) reflects that "rubber was ascribed ethically correct and institutionalized qualities in contrast to the immoral and illegal connotations of opium."

My research has also revealed an existing conviction among Chinese companies and state officials alike that northern Laos needed corporations – not smallholders – to establish rubber. Despite examples in other places where smallholders constitute a major portion of the rubber sector and often outcompete corporate plantations (Dao 2015; Gordon 2001; Montefrio 2016), rubber production in Xishuangbanna began as a state-owned enterprise plantation crop and, while smallholders have been slowly integrated, companies remain the central pillars of the rubber sector. This dominance of rubber companies over smallholders emerges in large part from the history of rubber in China as a military plantation crop and the attendant state support for domestic producers of this strategic crop.

This also fits with China's non-traditional approach to development cooperation. Especially over the last two decades, Western aid organizations have advocated for the strict separation of aid from investment and trade activities (Nyiri 2006, p. 84-85 cited in Cohen 2009, p. 4). The Chinese state, in contrast, portrays Chinese companies as key agents of development cooperation, and their investments as a way of aiding recipient countries in following China's own successful development path (Scoones et al. 2013). Beijing promotes large-scale agribusiness investments as a central component to its growing commitment to South-South development cooperation. In this sense, China departs from traditional aid donors who espouse a strong divide between trade and aid. China eschews purely aid-based development interventions and supports large-scale infrastructure and commercial agriculture investments as beneficial tools for capital, technology and knowledge transfer (Buckley 2013) – projects you can "see and touch," as one Ministry of Commerce staff described to me (Interview, Beijing, July 2015). Under this more business-oriented approach to aid, Chinese companies investing abroad are being tasked with a new role as agents of Chinese development cooperation. The Chinese state provides them support while expecting their plantations, roads and factories to provide wage labor opportunities, infrastructure, market access, and skills training in host countries.

On the other hand, opium cultivation was just one of a set of activities that the Lao government considers an obstacle to economic development. Opium is associated by the Lao state with shifting cultivation, a traditional agricultural technique the Lao state has long deemed environmentally destructive, a poverty trap, and anchored in the cultural backwardness of minority groups, and which the Lao state has placed various restrictions on (Fujita & Phanvilay 2004; Kenney-Lazar 2013). Meanwhile, the Chinese state views drug use, cultivation, and trade not simply as social ills to root out but as a threat to national security and political control. Opium is associated with a 'century of humiliation' when widespread addiction to the drug and a resulting trade imbalance with the British empire crippled the Qing dynasty and led to its fall. When the Communist Party came to power in 1949, it announced that the elimination of opium cultivation within its borders as one of its first acts, and its declaration of the elimination of opium in the early 1950s was seen as legitimizing the party's rule (Lu et al. 2008; Qian et al. 2006). Thus, both states view the persistence of opium cultivation as a symptom of isolation from government services and markets, and of the general political instability in the borderlands.

Rubber is therefore not necessarily a tool for physically replacing opium in situ, but for integrating the borderlands, politically and economically, on a broad scale which both states consider conducive to ending opium cultivation in the long run. Rubber can be understood as an ideal replacement for opium only after recognizing the broader 'ideological legacies' of the two crops in relation to larger development problems in the borderlands engaged by the Chinese and Lao states alike (Sturgeon et al. 2013, p. 53). The vast expansion of rubber plantations – established perhaps not atop former opium fields but in the uplands nearby – is therefore meant to generate higher incomes and labor demand, thus drawing land and labor away from opium cultivation. To many Chinese and Lao actors, the economic transformation of Xishuangbanna appears to prove rubber's instrumentality as a tool for modernization and development progress. In their eyes, what better model for transforming the opium cultivators of the northern Laos borderlands than Xishuangbanna?

These ideological legacies color how its implementing agencies are responding to recent market stresses (e.g. the 2011 rubber price drop) or to criticisms of the policy's mixed performance thus far. Despite the price drop, the Lao state has labelled the cutting down of rubber trees a form of forest destruction and have consequently banned the conversion of rubber to other crops (Vongvisouk & Dwyer 2016). Chinese state officials shrugged the price drop off as a temporary delay to the development benefits rubber would bring to Laos (Interviews, Jinghong, July 2014; Kunming, July 2014). As predicted, although prices will never recover to their pre-drop high, Chinese companies have proceeded to purchase, process and export the latex now being produced across Laos (discussed in greater detail in Chapter 5). The historical origins of these views help to explain why, despite the price drop, Lao and Chinese officials continue to support rubber when its market advantages over opium are so unclear. Moreover, these views of rubber and opium have had material consequences for how the ORP was designed and implemented.

3.5.2 ORP Companies as Agents of Development

If rubber has been constructed as a tool for driving economic development in northern Laos writ large, then the Chinese companies engaged in investing in rubber through the ORP are constructed as agents of Chinese development cooperation. While both the Beijing and Yunnan governments have clear stakes and interests in the ORP, the policies regarding its implementation and company oversight are still vague and indirect. This gives ORP companies significant latitude when operating in Laos. The company managers I interviewed echoed official aims of opium eradication through alternative development – specifically of plantations as vehicles for technology transfer, wage-labor opportunities and infrastructure development. But in actually establishing and running plantations, their views on development were also articulated through the management decisions they made, from their investment in training Lao farmers to their preferences for land access arrangements, and the way they compare themselves to other stakeholders in Laos.

Chinese interlocutors – both company representatives and state officials – frequently compared Xishuangbanna to northern Laos in interviews, citing their similar climatic, geophysical, sociocultural and agricultural features. Yet many differences between the two places exist, thus this comparison and the inattention to key differences is noteworthy because it frames their justification for why rubber remains the dominant crop planted by ORP companies. One manager placed special emphasis on the former prevalence of shifting cultivation in Xishuangbanna (Interview, Luang Namtha, December 2012), which remains a dominant land use in Laos despite state efforts to eradicate it. He also noted linguistic, religious, and cultural similarities between the Dai in China and some northern Lao ethnic groups. Due to these perceived similarities, Chinese companies assume their experience with rubber in Xishuangbanna will translate smoothly to Lao contexts. Echoing Mr. Wen's sentiments described in the introduction, one manager I met in Luang Namtha proclaimed, "Laos is like our Xishuangbanna 20 … maybe 50 years ago. They can learn much from us, that is why we are here!" (Interview, Long District, January 2013). I heard this comparison made repeatedly throughout my field work, with some interlocutors comparing Laos to Xishuangbanna, some to Yunnan Province, and some to China more generally.

Scholars have criticized China's project of modelling development approaches in Laos after its own development path as condescending, and have questioned the "broader civilizing mission that envisages the transference of idealized Chinese qualities (such as scientific rationality, technical competence and entrepreneurial spirit) to 'backward' peoples" in Laos (Cohen 2009, p. 6). My interviews suggest that the Laos-based Chinese plantations managers I met would not object to this characterization – they proudly present China's development model as superior, and as a path to be emulated or imposed in Laos. Many came to Laos from being ethnic minorities in Xishuangbanna considered formerly uncivilized themselves. In their own lifetimes, they have witnessed first-hand the dramatic economic change and integration into the geo-body (Winichakul 1997) that is the Chinese nation, and count themselves among the economic beneficiaries of that integration and pattern of development. Thus, in the minds of a range of the Chinese investors in Laos who I encountered, the view of Laos as following China's development path is not meant to be condescending. Rather, they express the comparison as a vision of optimism and comradery, just as they see their engagements not as solely profit driven but also as a form of development cooperation or "aid."

What's more, many company managers criticized other countries' development interventions. They were particularly disparaging of grassroots level, small-scale projects they observed in Laos (e.g. water well maintenance and smallholder agro-biodiversity initiatives) which they portrayed as having failed the Lao people, since deep poverty and development issues persist. Chinese managers referred to these development projects as small-scale and short-term, and proclaimed their own dual development and profit motives as the strength of their approach. The fact that rubber is a tree crop ties companies to the land for a long-term period (20-30 years) and Chinese plantation companies typically sign land concession or contract farming agreements with the Lao state for the duration of that time. One manager proudly proclaimed (Interview, Luang Namtha, December 2012),

> "Many others, Japanese and Western companies, come here and give a bit of money. That just solves surface problems … Our company will be here for many decades. Of course, our main purpose is to make money! But as such, we need to take care of our relationships, so we invest in the villages around here. We have a long term outlook."

Given that respondents were aware that I was an American and that I had had to obtain research approvals from the Lao government, which they work to maintain the favor of, such statements may involve posturing. Even when I met them informally instead of through my Lao state research approvals, most of my Chinese interlocutors were eager to convey the positive impacts of their work. Still, the manager's words demonstrate how managers frame their own claims to bringing lasting, sustainable development impacts to Laos. To them, these claims are legitimized by the fact that rubber is a long-term investment. They refer to cultivating strong village relations as being central to their business plan (e.g. the recruitment of labor and avoiding the cost of conflict), not as a moral project. Thus, managers running ORP plantations consider their business operations and their development objectives to be intertwined.

This belief in the compatibility of business motives and development objectives also permeated my interviews with Lao state officials. When asked why certain areas had been selected for investment, they often stated that poor areas were targeted because rubber was a strong cash crop, and companies would provide a range of services once rubber tapping had begun to generate profits. Investments in roads, wells, and other infrastructure were observed but had mixed impacts – some were vital improvements to adjacent villages' living conditions while others were poorly serviced and in disrepair. Regardless, it became clear that the development logic behind the ORP champions the long-term, broad benefits Chinese rubber might bring to Laos while ignoring the importance of opium for generating immediate incomes and relieving immediate financial distress.

3.6 Conclusions

The ORP has had obvious impacts on the economic development of northern Lao, but its impact on opium production is unclear. In 2005, at the culmination of the national elimination campaign carried out jointly by UNODC and the Lao government, opium production in Laos dropped to negligible amounts. By 2014, however, production had slowly recovered to reach an estimated 92 tons – 70% of the average annual production between from 1992-2003 (UNODC 2015, p. 17). Many have suggested that China's hunger for cheap land and rubber to feed its burgeoning economy, not a genuine commitment to reducing opium cultivation, explains the establishment of the ORP and the predominance of rubber investments within the program. In my analysis, in contrast, I demonstrate that the ORP was established out of multilevel concerns that opium cultivation in Laos and Myanmar posed a threat to Chinese national security. That said, the ORP's design was the product of multiple factors far beyond opium cultivation, and recognizing those factors is pivotal for better understanding why and how Chinese capital is encouraged by the state to invest beyond its borders.

While the ORP mirrors other opium replacement initiatives by trying to undercut the economic drivers of opium cultivation and create wealth through other land-based livelihoods, it was conceived and designed in the context of China's troubled history with opium and its growing concerns for security along its southwest borderlands. This history and the concerns of political instability it fuels has made the Chinese state treat the return of opiate use and the drug trade in China as nothing less than the degradation of social stability and the political legitimacy of the Communist Party. Rubber, meanwhile, has been championed as the crop that civilized China's southwest borderlands. It is credited with stabilizing shifting cultivation practices and integrating Xishuangbanna's ethnic minority groups into the fold of the Chinese state. I argue that these ideological conceptions and discourses around rubber and opium, and their role in the political development of China's borderlands, are what both the Yunnan Provincial state and Chinese firms operating in Laos have harnessed to not only implement the ORP, but to use it to advance their own ends.

The ORP takes a well-established idea – that of replacing illicit crop cultivation with licit cash crop production – and combines it with China's model of rural development through state-supported agribusiness. Instead of replacing opium fields with rubber plantations through bottom-up initiatives supporting opium cultivators themselves, it is designed to provide top-down support to agribusiness investors in order to establish commercial agriculture on scales vast enough to transform the Lao borderlands. The ORP thus attempts opium replacement not necessarily by physically replacing opium fields with rubber plantations, but rather by drawing land and labor into rubber, away from opium.

This chapter demonstrated how the Chinese state projects of promoting rubber, curbing the opium trade, and preserving state control and political stability in the rapidly opening Yunnan borderlands articulated in shaping the Opium Replacement Program (ORP). I argued that the Yunnan Provincial Government was able to use the ORP as one platform through which it has repositioned itself as an important borderland 'bridgehead' instead of a backwater peripheral province as it has been seen throughout the country's history. I examined a number of aspects of the ORP's design which have been interpreted as contradictions, but which I showed make sense when considering Yunnan provincial leaders' aims of ushering in this transformation of the province's role.

More broadly, this chapter contributes to the dissertation's aim of characterizing the shifting state-capital relationship by demonstrating how the Yunnan provincial government, and Chinese ORP firms in turn, mobilize national policy discourses for their own, often divergent interests. It focused on the provincial state as a way to reorient the analysis of China's global integration in a way that better attends to the actual, on the ground, spatial practices and patterns that constitute Chinese capital as it moves over the border and encounters new host country contexts. This sub-national focus reveals why Chinese companies have invested in rubber instead of other crops. It addresses the contradiction between investors' tendency to establish rubber plantations far from regions of opium cultivation, and yet they are still lauded by state implementers as drivers of development cooperation and alternative development. It also illuminates the reasons rubber has appealed so strongly to Lao state actors who, in turn, eagerly facilitate Chinese land investments and promote rubber cultivation widely among Lao smallholder farmers, which will be a focus in the following chapter (Chapter 4). This focus, in sum, demonstrates how the ORP has helped Yunnan shift from a role as China's internal resource periphery – a remote backwater province valued as a source of raw materials for the industrialized East coast industrialized provinces – to a bridgehead between southwestern China and Southeast Asia.

4 Seeking Land in Laos: How Chinese Investors Navigated the Fragmented State

4.1 Introduction

Through the late 1990s and early 2000s, the Lao state established a series of policies opening the country's land markets to foreign investment and laying out a regulatory blueprint for negotiating and governing land deals. This blueprint, however, changed frequently, contained contradictions, and was unevenly enforced. In this chapter, I ask what this changing regulatory landscape and the territorial designs underlying these land deals has meant for Chinese investors seeking to invest in rubber in Laos. I argue that negotiations between Chinese rubber investors, the Lao government, and local land users are shaped by ongoing process of state territorialization which Chinese investors were largely ignorant to when they first arrived in Laos.

The mechanisms through which Chinese investors gained access to land in Laos were complex and changing continuously as Chinese rubber deals were established throughout the 2000s. The companies I studied approached authorities at different levels (central, provincial, and district) and in different ministries across the Lao state, and these companies had distinct priorities, concerns, and demands in selecting land. I found that, while each company underwent a unique process through which they gained land for establishing their rubber investments, all were allocated far less land in practice than they were initially granted in their investment contracts.[58] Moreover, some were granted concessions, which gave them exclusive use rights over land, while others were only able to establish contract farming agreements under which land rights remained in the hands of Lao farmers. I show that this reflects the contrast in Laos between the fragmented claims of different Lao state actors to authority over land and the ability to actually control and transfer land access on the ground. This contrast opens a wide arena for negotiations between actors within the Lao state and between state officials, Chinese investors, and local land users.

Of the companies I interviewed, LongYun Company has been the most successful at obtaining land. It has the largest area formally granted to it (10,000 ha) and this land was granted as a land concession instead of a contract farming agreement. I argue that its success was a result of the strategic territorial interests of Lao actors involved in facilitating the deal and the history of contested land governance in the area in which LongYun invested. LongYun Company was able to procure the land arrangement which most companies sought – a large-scale land concession with strong backing from its provincial state and military partners. But the process through which it obtained this arrangement reveals that Chinese rubber investors' access to land is less contingent on

[58] This chapter focuses on the gap between the formal agreements companies made with Lao state land authorities and what they gained access to on the ground. I use the term 'granted' to refer to the areas agreed upon and written into contracts between the Lao state and Chinese rubber companies. I use the term 'obtained' to refer to the land companies could actually access, establish plantations on, and therefore accumulate from (Ribot & Peluso, 2003). which typically had to be first surveyed, mapped, and discussed with local land users through active facilitation by Lao state authorities.

company demands or capacity than on the dominant logics of state spatial control in Laos and the contested and incomplete nature of the Lao state's territorial control. The account I provide of companies' experiences negotiating for access to land is, as a result, also an account of the institutional organization of Lao state authority over land governance and land investments and the resulting reliance of foreign investors on Lao state actors as facilitators of land access.

4.1.1 The LongYun Plantation

The dirt road leading to LongYun Company's plantation is flanked on one side with steep hills carpeted by rubber trees and on the other by the steadily flowing Mekong River. The Mekong separates this remote area of Luang Namtha Province in northwestern Laos from neighboring Shan State in Myanmar. Shan State is a hub of opiate and amphetamine production and trade that has been embroiled in periodic violent conflict for decades. Controlling the area is considered so strategically important to national security in Laos that it is under Provincial Military control. No one would guess, however, that this quiet road, sparsely populated with farmers and fishers whose small silent boats occasionally glided across the Mekong to trade in Myanmar, had any military presence (Figure 6).

Figure 6. Mekong River Crossing to Myanmar

Figure 7. Entrance to LongYun Company Plantation Complex (Author 2012)

In stark contrast, once arriving at the entrance to the LongYun plantation complex, a visitor is greeted by a grand iron gate behind which three flag poles fly Chinese, Lao, and LongYun Company flags (Figure 7). In the center of the complex, Mr. Huang, the manager, keeps his office heavily air conditioned. His office walls display a large map of their land concession, framed awards from China and Laos, propaganda posters for the Opium Replacement Policy, and the company's official business license. Mr. Huang welcomed me warmly but then soberly explained that the complex was set in an extremely "wild" and "backward" area.[59] He insisted that my Lao translator and I stay in the company dormitory while conducting our research instead of in a nearby village. "It's safer that way" he assured me, "outside, it's very chaotic!"

For a company as besieged as Mr. Huang claimed, LongYun controlled the largest concession area of any Chinese rubber companies recorded in the national inventory.[60] According to the inventory, it had signed a contract with the central government initiating the deal and authorizing the company to proceed in developing its 10,000 ha land concession in 2009. Once I arrived in Luang Namtha Province, however, provincial officials revealed in interviews that LongYun had actually come to the province seeking land in 2006 – three years before their central level concession contract was signed. LongYun had no prior experience in agriculture or investing in land abroad. What they did have was considerable capital, Chinese state support through the Opium Replacement Program (see Chapter 3), and Chinese political connections as a major telecommunications and entertainment company in Yunnan.[61]

When LongYun arrived in 2004, the Luang Namtha Provincial Army had just begun searching for investors to develop the remote northwestern areas of the province bordering China and Myanmar. These border areas were zoned as military land but were heavily forested aside from a few sparse village settlements, lacked road access, and, therefore, were extremely difficult for the Army to access regularly. The Provincial Army was trying to establish barracks but needed funds to build and operate roads to access the area (Interview, Luang Namtha, 2012). In subsequent visits in 2015 and 2017, I was told that some of the villages in military areas were still physically inaccessible, even by Army vehicles, and that I could only reach them by boat or by foot and at my own risk. Lao state officials consistently referred to the area as dangerous and warned me not to stray from village and plantation areas.[62]

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[59] *Yewai, Luohou 野外,落后*

[60] In 2011, the Government of Laos, along with development partners (GIZ, Centre for Development and Environment) completed a National Inventory of Land Leases and Concessions.

[61] Branching out and investing in sectors outside a company's area of expertise is more common business practice in China than it may be in other countries. When asked, multiple company managers interviewed said LongYun's leadership had a genuine interest in engaging in development cooperation, and that rubber simply seemed like the best crop through which to spur rural development in Laos. Even if they lacked experience in rubber compared to other companies, one manager suggested the company simply expected the plantation managers they hired from China to have the technical expertise required (Interview, Long District, Aug 2017)

[62] Their warnings were well founded. In 2011, two Chinese cargo ships were attacked just upriver from the LongYun plantation. All 13 members of their crew were murdered. Law enforcement authorities in China,

Within a few months of beginning its search for land, LongYun signed a concession and road construction agreement for a rubber plantation with province level representatives of the Army, the Planning and Investment office, and the Ministry of Justice. The concession contract granted 10,000 ha of land located "in the Xiengkok area." Although army and state officials had discussed the location of the company complex in early village consultations, they provided no further specification as to where in that area the company would have access for tree planting.

With this contract in hand, the company rapidly erected the walled complex I would later visit and began planting rubber trees on the seemingly ample available land around the complex. Within a few months, however, the company was embroiled in a bitter conflict with nearby villagers who went out to farm their upland rice fields only to find the crops obliterated and replaced with rubber. The ensuing conflict (described in greater detail in Chapter 5) forced representatives from the Army and several government offices from the District and Province levels to mediate in early 2007. Mediations affirmed violations by the company and resulted in an agreement (see Figure 8) that the company would compensate villagers for the impacted land and crops. When I visited in 2017, villagers had still not received the compensation promised, whereas the company had continued to expand. "None of them did as agreed" one member of the Village Association said shaking his head, "the company just took all the land" (Interview, Long District, August 2020).

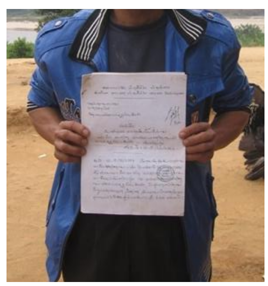

Figure 8. Village Chief holding a copy of 2007 land conflict resolution with LongYun Company

Since the company began to establish trees in 2007, district, province, and military officials involved in the deal regularly documented its progress. They documented land surveys conducted by teams including district authorities, army representatives, village leaders, and company managers. Survey teams visited the areas together to delineate potential plantation land from village land and to note ecologically sensitive areas for exclusion from the plantation. But a number of factors have slowed the pace of these surveys and therefore of the state parties involved actually allocating land to the company. First, LongYun pays concession fees and income tax to higher levels (initially the provincial government, then the central government after 2009). Yet it is district officials who have the clearest sense of where available land lies. Therefore, the

Laos, and Thailand launched an international effort to locate and arrest the culprits. The coordinated hunt resulted in the arrest of Naw Kham, an opium kingpin active in Myanmar who was subsequently sentenced to death in China. The incident served to heighten Chinese and Lao state characterizations of the region as lawless and insecure. Interestingly, it was also dramatized in the 2016 Chinese blockbuster action film "Operation Mekong" which won the Golden Rooster Award (a competition for mainland Chinese films) for Best Picture in 2017.

district officials carry out most tasks related to identifying and demarcating specific plots of land to allocate to the company. District officials expect the company to pay per diems to any participating staff and cover all costs related to allocating land, from conducting surveys to organizing village consultations.

LongYun's manager Mr. Huang chafed at this, complaining to me that the company must pay its state facilitators not just once but at every level and for every iteration of service provided – services that would have been performed not only more quickly and completely, but would have been included in the concession fee in China. Referring to Lao state officials, he bristled, "they all take their fees but they don't do their jobs." Despite these payments, moreover, some allocated land has proven unsuitable for rubber production (e.g. too steep or rocky) and new conflicts with villagers over plantation expansion, labor, and land compensation continue to hamper company operations. By 2010, around 2,300 ha had been surveyed and developed by the company and in 2012 another 2,512 ha land was reportedly surveyed in another area of the district (for a total of 4,812 ha allocated). But the 2011 drop in global rubber prices has impacted the company's access to funds for further surveying, and villagers in the area are increasingly resistant to the concession. For these reasons, as of 2017, the expansion of its plantation land had stagnated at around 3,500 ha.

Although far less than the 10,000 ha it was granted in its original contract, LongYun was able to access a considerable area of land in the end, and all of this land was granted as a concession, giving the company exclusive control over the areas it was allocated. Many other Chinese rubber investors shared LongYun's political connections in China and considerable capital wealth, and many had more experience in rubber and investing in Laos than LongYun. However, all other companies were granted far smaller areas, and most have been allocated less land as well. I attribute LongYun's relative success to the fact that it partnered with the provincial Army. The Army itself had specific strategic reasons for encouraging the company to establish a rubber plantation, as well as a particularly strong national security claim to authority in that area. As for the central level concession contract signed in 2009, the provincial officials I interviewed explained that this contract was only created to appease the Lao central state. In 2009, the National Law on Investment Promotion established a 150 ha cap on province level authorities' power to grant land concessions (Interview, Vientiane, September 2012). In response, representatives of LongYun had gone to the capital in Vientiane to sign a national level concession contract retroactively authorizing the project, originally approved only at the province level.

As I will show in this chapter, my subsequent study of 17 other companies has revealed that experiences like that of LongYun Company are common across the Lao regulatory landscape. Most were granted generous amounts of land in their initial investment contracts but were only allocated far smaller areas in practice. There is a persistent vertical disconnect between province level land granting activities and central level oversight of the process, as well as a combination of competition and poor coordination horizontally across ministries at the same level. In some cases, central level state actors granted concession contracts to companies without consulting province level authorities. Different line ministries also interpret and implement regulations differently from one another, sometimes also inconsistently from company to company or at different points in time.

These gaps, inconsistencies, and internal contradictions are not merely evidence of a weak regime of land governance in Laos (Barney 2009; Creak & Barney 2018; Lu & Schönweger 2019). Rather, I argue that Chinese companies' access to land is contingent upon specific state interests and tied up with the territorialities of governance. Such interests do not always cohere, nor do they consistently align with investors' objectives. State interests in Laos are fragmented and while Chinese rubber investments do serve to extend and deepen long standing processes of Lao state territorialization, they have also become mechanisms for advancing sometimes divergent individual state agencies' authority over land which. As a result, investors struggle to navigate the constellation of Lao state institutions through which they seek land.

4.2 Land Investments and State Formation

In 2008, a report by the international non-profit GRAIN highlighted the rapid rise in large-scale allocations of land in the global South to transnational corporations and financial institutions – a phenomenon which the report and subsequent deluge of research and media coverage referred to as the rise of global land grabs. There was particular focus initially on the astonishing amount of land being granted to foreign investors and what this meant for the territorial sovereignty of the state in countries hosting these investments. As Fairbairn (2013) points out, many accounts treated land grabs as "a top-down phenomenon driven by global markets or foreign states" (p. 335). Others have argued that, by transferring land into the hands of foreign firms, decision-making around land management occurs far from the land itself (Zoomers 2010) and brings in a new set of actors who are not necessarily known by or accountable to local land users (Peluso & Lund 2011). Through this reasoning, the shocking size of areas being reported as granted to foreign investors was assumed to reflect the fact that foreign investors exercised considerable influence over host country actors (Darby 2010). Host country governments, on the other hand, were often depicted as weak, susceptible to corruption, and it has been suggested that investors purposefully target countries with weak land governance regimes (Anseeuw et al. 2012; Deininger et al. 2011).

Laos is depicted as a hot spot of land grabs and a victim of powerful foreign land investors. It is regularly introduced in international media coverage of land investments as "little Laos" (Loveard 2019) or "landlocked and impoverished Laos" (Reuters Reporter 2018) and is frequently portrayed as "vulnerable to China's growing economic might" (Crispin 2010) or "preyed upon by its more economically advanced neighbours" (Environmental Investigation Agency 2011). Chinese investments, especially, have ignited fears of land investments eroding Lao state territorial sovereignty. Reports that prices for land and goods in northern Laos are sometimes calculated in Chinese yuan instead of Lao Kip or the establishment of Special Economic Zones run by Chinese developers have inspired claims that these regions are evolving "a kind of shadow or para-state" (Walsh 2009, p. 9) or coming under Chinese extraterritorial control or becoming unofficial colonies or provinces of China (Gouil et al. 2017).

These characterizations, however, tend to treat sovereignty narrowly. Sovereignty as a concept is often used to describe the power of a nation-state in comparison to competing outside forces, reflecting a conventional understanding of state power as unified and unlimited authority over a formally recognized territory – something Agnew (2005) and others have pushed against. Many modern states, however, are equally if not more focused not only on defending their territory against external forces but also on "the spatial organization of state administration within a state territory" and therefore have "increasingly turned to territorial strategies to control what people can do inside national boundaries" (Vandergeest & Peluso 1995, pp. 386, 385). Scholars in the literature on land grabbing demonstrate that foreign land investments can do far more than bring in foreign capital, generate government revenues, drive agricultural production and contribute to rural development where countries lack the financial capacity to drive these processes themselves. Land investments also affect host country politics and have been found to even enhance state power and drive forward processes of state formation (Lavers & Boamah, 2016). Some have gone so far as to suggest that host country leaders leverage foreign land acquisitions to expand control over areas currently contested or outside of formal state control (Borras Jr et al. 2012; Murton et al. 2016), thus using foreign land investments to extend projects of state internal territorialization.

There is a consensus among scholars of land politics and development in Laos that "conventional notions of sovereignty as unlimited and indivisible rule by a centralized state over a territory and the people within it" has limited utility in analyzing the Lao state (Kenney-Lazar 2019, p. 2), although different alternative conceptualizations are offered. Tan (2017), similarly, has referred to the Lao government as functioning as a 'catalytic state,' a term borrowed from Weiss (1997) to denote a state which pursues its governing objectives not through its own resources or capacity but by forging coalitions with other states, non-state entities, and private sector actors. Tan uses the case of Chinese investments in Special Economic Zones in Laos to argue that the Lao state forms strategic alliances with Chinese capital as a rational strategy for exercising indirect rule (p. 142). Kenney-Lazar (2019), similarly, describes sovereignty in Laos as relational and authority over resources as involving "contested and consensual relations among heterogeneous actors that produce and transform authority in complex and variegated spaces." These formulations of Lao state sovereignty interpret the fact that the Lao state relies on outside actors to assert control as a sign of strategic intent.

While these readings of Lao state sovereignty and territorialization shed light on the relationship between non-state and state actors, the internal structures of the Lao state require another layer of analysis. Many accounts of land governance issues in Laos tend to focus on divides and struggles between the state and agrarian populations, often without acknowledging the institutional contours of authority and degree of contestations within the Lao state. As Dwyer (2011) notes, in these accounts "state, government and policy speak in a single voice" (p. 109), as do parallel accounts that attribute the impacts of state land tenure interventions like the Land and Forest Allocation Program (LFAP) to implementation problems, a disconnect between the policy's aims and the Lao state's capacity to implement it. Stuart-Fox, for example, has demonstrated that, though the Pathet Lao may exercise considerable top-down discipline, provincial leaders also operate with marked autonomy (Stuart-Fox, 2003, 2005, 2009). Dwyer also highlights the role of provincial and district state officials in mediating the transformation of land into formal property and the assertion of authority over that transformation process.

Lund (2011) describes the Lao state as possessing a fragmented sovereignty – shared with international development organizations which have funded many of the land reforms discussed in the following section. Lao state authority, Lund asserts, is still being consolidated, thus key internal divisions, redundancies, and contradictions still exist and result in a plurality of approaches across state institutions and the need to engage non-state actors. Lund focuses on the role of international development donors funding land titling programs and argues that the Lao state has used donor support to extend and consolidate power over land through those programs. More than a decade after the case studies Lund uses, Lao state sovereignty remains fragmented – Lao state institutions remain disconnected, competing for authority over land – but foreign direct investment has emerged as a new tool that state actors employ in their respective struggles over and efforts to consolidate sovereignty.

Considerable research has been conducted on how land acquisitions have actually strengthened state territorial control in Laos. Foreign land acquisitions have served as tools for state territorialization – the latest iteration in a progression of state efforts to convert the Lao hinterlands into zones of accumulation, through processes of enclosure and primitive accumulation (Baird 2011; Kenney-Lazar 2012), and the production of relational resource frontiers (Barney 2009; Laungaramsri 2012). Foreign land deals have been instrumental for managing populations with whom the state has a tense political history, anchoring them in the locations and livelihood activities which the state deems appropriate (Diana 2009, 2013; Dwyer 2013). Rubber investments, especially, have driven specific patterns of agrarian transformation from subsistence upland livelihoods to a reliance on cash incomes and markets which are often disruptive but nevertheless considered signs of progress by the Lao state and many of its development partners (Friis et al. 2016; La-Orngplew 2012). Those arguing for this view of acquisitions as tools for state territorialization have pointed to the ways certain populations, including shifting cultivators, opium producers, and upland minorities with histories of rebellion against the state, and the landscapes where they reside and rely on for their livelihoods were previously targeted in state land reform efforts and are now so targeted by state-facilitated land investments (Dwyer 2013). Land deals have thus served to enhance state efforts to control and discipline populations, rewarding the politically loyal and relocating or dispossessing dissidents; these deals have been used to make certain landscapes more legible (Tan 2017, p. 143), and to enclose valuable resources for state accumulation (Lagerqvist 2013; Thongmanivong et al. 2009).

In line with these scholars, this chapter demonstrates how various actors within the Lao state extend its authority over land through the process of granting land deals to Chinese investors. As an institution made up of different actors sometimes driven by contradicting objectives or limited by uneven governing capacity, the fragmented nature of the Lao state generates obstacles to Chinese investors in their efforts to access land. In the next section, I trace the formation of authority over land at multiple levels within the Lao state through the process of either acknowledging or denying competing claims to certain spaces and resources. The scope and constitution of this governing authority has been shaped by different Lao state actors' efforts to control and direct the management of land and the resources and people on it. But as in many post-colonial and post-socialist societies, the Lao state is made up of an incongruous set of institutions and actors that lack a monopoly on the means for controlling land (Sikor & Lund 2010; Sikor et al. 2017). Instead, it has relied on non-state actors – foreign development aid organizations and, more recently, foreign investors – to carry out these efforts.

4.3 The History of Land Governance in Laos

The Lao People's Democratic Republic (Lao PDR)[63] was founded after four decades of war: first for independence from colonial France; then through the Vietnam War which played out partly in Laos; and finally through a civil war between the US-backed Royal Kingdom of Laos, that came to power after independence from French colonial rule in 1953, and the Pathet Lao, a Soviet Union- and Vietnam-backed communist group. The civil war ended with a heavily assisted victory by the Pathet Lao, which then established a one party socialist state in 1975 and set about attempting to forge a unified nation out of its remarkably diverse, still highly disconnected population and ensuring its territorial boundaries. But internal division continued to simmer with armed rebel activities continuing through the 1990s and beyond (Baird, 2011; Ruohomäki, 2000). Many of these armed rebels were based in the country's extensive forested uplands, a fact which has served to reinforce the long history of classifying political subjects loosely along topographical lines in Laos (Lestrelin, 2011). Rebel activity also simmered in northern Laos into the 1990s, years after it ended in southern Laos. The Lao state's territorial control is therefore both still in the process of being built and consolidated, and highly uneven across the national territory.

Since the founding of the Lao People's Democratic Republic in 1975, land and resource governance has played a key role in processes of state formation and the assertion of territorial sovereignty in the country. Lao state approaches to land and resource governance have been shaped by a view of shifting cultivation (and, by extension, of the upland ethnic minority communities who practice it) since the colonial era as backward and destructive, and the role of timber as a main generator of wealth and therefore of forests as primary sites of struggle over land. Another important trend has been the ongoing effort to integrate the country's more remote provinces into the national economy and political system (Goudineau 1997, p. 13). The goals of stabilizing shifting cultivation, claiming forest resources for the state, and consolidating central level state authority have underwritten the spatial logics of Lao state interventions around land from resettlement and shifting cultivation stabilization, to the LFAP, to 'Turning Land into Capital' (TLIC) by granting land concessions to foreign investors.

Forests have been a primary source of state revenue since the colonial era when timber was logged throughout French Indochina and exported. Forest resources continued to fuel economic development for the first two decades after the country's establishment. Logging operations were performed by a handful of (initially 9, consolidated into 6) state forest enterprises and forest resources constituted 45% of the national value of exports in

[63] For the purposes of this dissertation, I refer to the Lao PDR to specifically indicate the nation-state founded in 1975, but I default to referring to the country as Laos when speaking generally and also where describing phenomenon that existed before 1975.

1979 (Phimmavong et al. 2009, p. 506) and was still 44% of exports ten years later in 1989 (Department of Forests, 1990). These forest enterprises were managed by provincial forest authorities which in turn were overseen at the central level by the Ministry of Industry and Handicraft (*ibid*). Timber exports grew rapidly through the 1980s as aid from the Soviet Union and Eastern Bloc declined, and the strategy of exchanging resources – primarily timber – for infrastructural investments became common practice at multiple levels of government (Anonymous 2000), a practice referred to as 'trading land for development' or 'timber-for-infrastructure deals' (Dwyer 2011b). In the 1990s, this practice began to have notable impacts on the country's forest resources and a 1996 Prime Ministerial Decree forbade authorities at all levels from "exchanging land for construction" and another Decree in 1999 prohibiting "infrastructure quotas" granted by provinces (*ibid*, p. 8). Nevertheless, there clearly existed a precedent for provincial and district authorities funding state projects by granting private sector actors resource extraction rights.

Resettlement has been used in Laos to achieve multiple state development goals. It is one strategy used to curb shifting cultivation by bringing people into the lowlands where paddy rice and permanent agriculture are more commonly practiced, to draw people out of forests and thus facilitate their enclosure by the state, and to integrate remote, often rebellious populations and regions into the national economy, services, and political structure. The Lao state has built upon the practice of resettlement already under way during French Colonial rule (Evans 1990; Stuart-Fox 2005). Resettlement strategies have also been described as an "instrument for the management and control of the territory" (Goudineau 1997). Villages located far in the uplands have been encouraged, coerced, and sometimes forced to resettle to lower altitudes for different reasons over time. In the 1970s-80s resettlement was focused on areas still actively opposed to Pathet Lao rule, including in the northwestern part of Long District, Luang Namtha Province where the LongYun concession is now located (Lyttleton 2004). Since the 1990s, resettlement has been justified as a way to bring poor upland villages closer to markets and government services, but assessments of the development impacts of resettlement have shown far more concerning negative impacts than positive outcomes (Baird & Shoemaker 2008; Lestrelin 2011; Lestrelin & Giordano 2005).

Shifting cultivation is a traditional and still widely practiced agricultural production system in Laos. It is a highly mobile practice, which made it extremely difficult for the colonial state to tax. It is also most commonly practiced in the uplands where permanent agriculture is less productive – the same uplands that are home to the richly forested areas the state sought to control for timber extraction. In response, the French colonial government outlawed the practice in 1875, though this was impossible to enforce at the time (Baird & Shoemaker 2008), and shifting cultivators continue to elude state efforts to replace it with permanent agriculture today (Kenney-Lazar 2013). Pressure from foreign environmental organizations and development experts to curb deforestation and the availability of a massive reserve of aid funding for forest protection projects, catalyzed by the aforementioned 1989 National Forestry Conference, resulted in a shift in Laos towards portraying shifting cultivation as ecologically destructive (Fujita & Phanvilay 2004; Fujita & Phengsopha 2008; Fujita et al. 2006; Kenney-Lazar 2013, p. 16). As a result, shifting cultivation continues to be depicted as backward and an obstacle to economic development and modern land governance by the Lao state and across Southeast Asia (Kenney-Lazar 2013; Vandergeest 2004).

Each of these state interventions, from resettlement to shifting cultivation eradication to the sale of forest resources for state revenues, reflect an interconnected set of objectives important to state territorialization. They not only separate communities from the land and resources valued and claimed by the state but also create political categories around certain land use practices and spaces which in combination facilitate processes of state territorialization.

4.3.1 The Land & Forest Allocation Program

Though the state projects discussed above existed and shaped land governance interventions in Laos since long before the country's founding, the LFAP extended and formalized the governing logics they represent. In doing so, the LFAP facilitated the boom in granting land to foreign investors that would follow. Launched in 1990, the LFAP constituted the "central pillar of state land reform policy" in Laos throughout that decade and into the 2000s (Barney 2008, p. 9). It has involved the formalization of property rights through land titling, land zoning, and land use planning programs. Like the preceding efforts to stabilize shifting cultivation, resettle upland populations, and delineate forest regions, the LFAP serves processes of state internal territorialization by making land more legible and asserting the state's authority to regulate its uses and govern its boundaries.

Land titling serves to both strengthen land tenure and, even when titles do formalize and strengthen certain groups' land claims, also exclude others (Ducourtieux & Castella 2006; Hirsch & Scurrah 2015; Lund 2011). LFAP-associated zoning and titling initiatives were ostensibly aimed at formalizing land tenure for local land users with the assumption that their access to the land and resources on which their livelihoods relied would be secured. But in practice, the LFAP has focused zoning activities on the task of separating village settlement and agricultural land from other forms of land. Following state goals of eradicating the practice, shifting cultivation fallow lands are categorized as 'degraded forest' (Baird 2014a; Kenney-Lazar 2013). Forest land is categorized as state land in Laos, which has meant that these initiatives have the effect of transferring authority over large areas of land (including multiple forms of communally managed forest, as well as fallow plots typically managed at the village level) to the state (Fujita & Phanvilay 2004). As a result, the program's tenure security benefits have accrued to communities with permanent agricultural plots but not the vast majority of people who still practice shifting cultivation. Assessments of the LFAP have therefore widely pointed out that LFAP measures of land titling are effectively used not only as strategies for development but as instruments for taking the authority over land management out of the hands of Village authorities and strengthening the central government's sovereignty, consolidating state control over rural populations, land and resources (Dwyer 2011a, 2013; Fujita 2006; Hirsch & Scurrah 2015; Vandergeest 2004).

The LFAP has been unevenly carried out across the country and remains incomplete with land zoning and land use planning programs still ongoing. Titling programs were launched by multiple different development organizations with different corresponding Lao state institutions. Nevertheless, by imposing the categories of agricultural and forest land as distinct and granting formal titles only for residential and permanent agriculture plots, the LFAP has had the consequence of formalizing the division between agricultural and forest land and therefore strengthened the basis for the state to claim the expansive areas zoned as forest. This, in turn, became the basis for TLIC described in the next section. I rehearse this evolution in land governance in Laos here as it demonstrates that a state need not set out with the stated purpose of facilitating land grabs or using foreign investments as political tools for them to function as such nevertheless. Rather, as Kelly and Peluso (2015) describe, "historical formalizations of state land created the enabling conditions for today's large-scale, international, and national acquisitions of land, in ways that were unanticipated at the time of state acquisition" (p. 473).

4.3.2 Turning Land into Capital

In the 2000s, the aforementioned practice of trading timber and other resources for development was re-envisioned under the mantra, "turn land into capital."[64] TLIC was initially proposed in a draft decree by the Ministry of Finance (which supervised the Department of Lands at the time) presented in 2005. It became an officially recognized strategy at the 8th Party Congress in 2006 but the ideas and practices behind it were rooted in preexisting state strategies of mobilizing resource extraction for development in the timber sector, as described above (Dwyer 2011b, p. 29). TLIC signaled to the private sector a shift in the Lao government's approach to development and economic planning that was more conducive to foreign land investment. The phrase has circulated widely across the country and is invoked in state development conversations at all levels to describe and justify a wide range of state interventions around land and resource governance. The slogan is used to refer broadly to "generating economic value from the commercialization of land, facilitating local economic development, and reducing state spending on infrastructure" (Kenney-Lazar et al. 2018, p. iv). However, these objectives are achieved through liberalized land access laws which enabled foreign investors to acquire exclusive land use rights instead of only gaining resource quotas. The vagueness of the TLIC has allowed a range of actors to interpret it and employ the slogan and its attendant logics and discourses to their advantage. It catalyzed a boom in land investments and the rapid transformation of rural areas into spaces of capitalist agriculture and market-oriented production.

In the years leading up to TLIC, the central state was struggling to pursue two different objectives in relation to land governance: to use the vast areas of land being rezoned as state land under the LFAP to drive national development, and to assert the central government's authority over state land and the benefits flowing from it. As mentioned above, local level state authorities had been granting land and timber for infrastructure construction since state forest enterprises were decentralized in the early 1990s. Prime Ministerial decrees in 1996 and 1999 forbade province and district level authorities from this practice, to little effect (*ibid*, p. 8). The Forest Law of 1997 established a hierarchy of limits on land granting, the structure of which has remained in

[64] *Khan han thi din pen theun* in Lao language

place since: institutions at the district level could grant up to 3 ha to investors, at the province level up to 100 ha, and anything above had to be approved at the central level. The country's Land Law, issued in 1997 and revised considerably in 2003, is similarly structured to limit province and district level authorities' power to grant state land to investors. Other policies restricted provincial authorities to granting land only in Type 1 sectors (agriculture, handicraft and tourism) but excluded hydropower and mining which involve far higher project budgets and state fees (Schumann et al. 2006, p. 11). Only in 2005 did the Prime Ministerial Decree on the Implementation of the Land Law No. 101/PM on 20 April 2005 give regulatory structure and enforcement power to the Land Law (*ibid*, p. 42). The Land Law marked a departure from previous regulations in that it permitted foreign investors to gain access to land through leases (short term agreements for non-state or already developed land) and concessions (longer-term agreements for state land, including non-developed forest areas).[65] It set state fees for these agreements and caps on the duration of different agreements.

Along with circumscribing the power of province and district level authorities to grant land, the central state also established a new institution to oversee all land granting activities at the central level. The 2005 decree established a system of governance across different state institutions and created a National Land Management Authority (NLMA) directly supervised by the Prime Minister's Office. Acting as the institutional hub, approving authority, and fee collecting agency for all land investments outside of the mining sector – an enormous amount of responsibility, formal authority, and access to the considerable flows of revenue expected from land investments (Wellmann 2012).

Not only was the NLMA designed to consolidate provincial level authority over land deals and assert central oversight, but it also disrupted the power of the Ministry of Agriculture and Forestry (MAF) held over land governance. MAF had been the primary line ministry involved in the myriad preexisting land titling, land use planning, and land zoning projects that fell under the LFAP. Through these programs, MAF staff at the province and especially the district level had gained significant training in land surveying, demarcating, and management. As the state authority responsible for governing forest areas, MAF authorities also led negotiations and oversaw the implementation of timber for development deals, which made them the first authorities foreign agribusiness investors approached when seeking land through the mid-2000s. These skills are as pivotal for granting land titles to villages and households as they are to finding, mapping, and allocating land parcels for agribusiness investors. MAF staff thus possessed far more relevant training and field experience than the fledgling NLMA, which was still struggling to exercise basic oversight. The Prime Minister's Office has since attempted to shift this imbalance in capacity by declaring periodic moratoriums on granting land (2007, 2009, and 2012) for the purpose of establishing a centralized reporting and monitoring system and slowing down local level agencies' land granting sprees (Baird 2014b, p. 62). In 2011, the NLMA was also combined with the Water, Resources and Environment Agency to establish a Ministry of Environment and

[65] Because the production cycle of rubber lasts up to 40 years, rubber investments are established under land concession agreements, not under lease agreements.

Resources, a move which even more definitively sidelined the role of MAF authorities in granting land deals (Lestrelin et al. 2013, p. 31).[66]

When Chinese rubber investors began searching for land in the mid-2000s, they encountered a particularly unclear and shifting regulatory landscape. On one hand, official statements that were aimed at attracting foreign investment in land advertised Laos as a frontier of untapped potential, particularly abundant in resource wealth and extensive areas of arable land available for investment. They depicted Laos as an open frontier for capital investment, as an empty, underpopulated wilderness (Barney 2009; Laungaramsri 2012). Measures of biodiversity or arable land were summarized and compared simplistically to the country's modest population of 6.5 million (the lowest population density in Asia) to further emphasize the country's relative resource wealth (Lao Statistics Bureau, 2016). Sources ranging from national media (e.g. Vientiane Times 2013) to investment brochures to the Ministry of Planning and Investment's website boast of the country's "plentiful natural resources with unexploited large areas of fertile agricultural land" (MPI, 2016). Development organizations were equally complicit in the depiction of Laos as an untapped new frontier ripe for capitalist expansion (ADB 2004; Fortune 2007 cited in Barney [2009, p. 147]). No group has bought into this vision more than Chinese investors. My Chinese interlocutors in both Laos and China constantly repeated the phrase, "China has people but not land, Laos lacks people but has land!"[67] All Laos needed, they reasoned, was an influx of Chinese capital to help them develop. As a result, they expected both strong Lao state support and cheap and easy access to land for investment in Laos.

This depiction of Laos as a frontier open for investment and resource extraction masked considerable obstacles to accessing land on the ground. Despite the NLMA's formal existence, there were still multiple state institutions all involved in different, often overlapping aspects of governing land investments and there was no national cadaster describing the conditions and availability of land across the country; only a vague call to turn land into capital. Heeding this call, investors from China and many other countries poured into Laos. State leaders at all levels competed with each other to attract foreign investors as access to land was liberalized. Ministries at the central and provincial levels alike have also competed to assert their roles in the granting and governance of land deals. The number of land deals granted grew at an astonishing rate from a handful in 2000, to over 100 by 2003, to nearly 2,000 projects in 2009 (Schönweger et al. 2012). The central government continued attempts to centralize authority over land deals

[66] I observed struggles between MAF state officials and the newly formed MoNRE when I began researching foreign land investments in Laos before graduate work in 2012. I was working as an assistant research on a joint project between two western development organizations and the central level MoNRE. The project's pilot phase from 2007-2010 had been initiated by the two development organizations and focused on compiling a national inventory of land deals. A central level MoNRE official accompanied me in each province while I conducted field work for case studies on the land granting process. That official was also responsible for photocopying and bringing back to Vientiane all documentation available on land deals at each of the line ministry offices where I conducted interviews. I therefore came to understand the function of the project I conducted research for as being, in part, to survey and gather formal documentation held by other line ministries at the province and district levels for the central MoNRE.

[67] "中国人多地少，老挝人少地多"

through subsequent laws and decrees enacted throughout the 2000s, culminating in multiple largely ineffective moratoriums on granting land and ongoing efforts to work with international development partners to inventory and monitor land deals.

4.4 The Entry of Chinese Rubber

Rubber was one of the first commercial crops for which state land concessions were formally granted to foreign companies in many provinces and is now by far the most heavily invested in across Laos (Hett et al. 2020). Before TLIC, cross-border agricultural production agreements looked very different from the state approved land investments that Chinese rubber investors would establish in the mid-2000s. Most involved informal cross-border arrangements between Chinese and Lao communities already connected by family or ethno-linguistic ties (Alton et al. 2005). As described in Chapter 3, cross-border trade was active through the 1980s and 1990s, but as the Xishuangbanna economy began to grow, more engaged forms of economic cooperation also emerged. Cash crop cultivation was encouraged, first through simple inputs trading, service provision (plowing with mechanized tractors and training), and short-term credit schemes. Low input crops like sugarcane, cassava, and rice increasingly flourished through outgrower and informal contract farming between Chinese and Lao villages straddling the border (Sturgeon 2013).

Rubber, too, was promoted in northern Laos through informal cross-border arrangements. It was introduced initially by Lao refugees returning from Thailand and China in the 1990s. They brought with them rubber seedlings, experience, and the connections they had forged with actors in the rubber sectors just over the country's borders (discussed in greater detail in Chapter 5). One village in particular, Ban Had Nyao in Luang Namtha Province, became famous as the first in a cluster of villages to establish rubber in the early 1990s. Had Nyao Village also happened to be the childhood home of the Luang Namtha Provincial Vice Governor at the time. He promoted his village widely as an example of how rubber cultivation and trade with China could bring prosperity to recently resettled communities (Diana 2009, p. 110). Lao farmers and state officials alike began to dream of the motorbikes, tin roofs, and concrete homes like those their Chinese neighbors already enjoyed as a result of the burgeoning rubber economy (Diana 2008).

The mythos of rubber as the lucrative cash crop which transformed Xishuangbanna articulated with Lao state logics of spatial control and land governance. As a tree crop that thrives on sloping upland hills unsuitable to most other cash crops, rubber was perceived as a silver bullet for multiple Lao state development goals in the uplands. Rubber, it was reasoned, would help stabilize shifting cultivation and reduce opium production by providing a permanent alternative. It would alleviate poverty, particularly in the uplands where rubber grows and which the state had been targeting for resettlement, by drawing farmers into export-oriented production. Rubber was even portrayed as contributing to the country's environmental commitments. One outcome of the National Forestry Conference of 1989, which, as mentioned above, linked forest degradation to shifting cultivation, was the establishment of a National Forestry Action Plan. This plan announced the Lao state goal for restoring the country to 70% forest cover by 2020 (Flint 2019). Rubber was subsequently categorized as a form of forest cover (GoL 2005 cited in McAllister 2015 p. 818) as it is in China and a number of other countries in the region.

As a result, rubber has been promoted by Lao state authorities for over three decades now, particularly in Luang Namtha and across northern Laos. In 1991 the 5th Luang Namtha Provincial Party Congress included the promotion of rubber in its poverty alleviation and shifting cultivation stabilization plan (Alton et al. 2005; Shi 2008, p. 17). A few years later, with the help of the Lao Agricultural Development Bank and financial and technical support from Yunnan State Farms just over the border, the provincial government also established a credit scheme for promoting smallholder rubber which ended up supporting the expansion of rubber cultivation in a number of villages in Namtha District around the province's capital (Interviews, Luang Namtha, August 2017) (Alton et al. 2005; Diana 2009, p. 110; Shi 2008, p. 17). These early smallholder areas would become models for rubber promotion throughout the country. In 2003, the Luang Namtha provincial government established guidelines for the promotion of both smallholder and large-scale rubber planting across the province, after which the first Chinese rubber investors began negotiating with the provincial government for land concessions.

There was thus already widespread state and farmer interest in rubber in northern Laos by the early 2000s. Global rubber prices began to rise in the 2000s, just as the Chinese government began to encourage investment beyond its borders, and rubber companies in Xishuangbanna began searching for land to expand into. It is, thus, no surprise that rubber cultivation spread rapidly across Laos in the 2000s and now constitutes the top crop invested in. In the first inventory conducted of state land leases and concessions in Laos in 2009, there were 225 officially reported rubber projects of a total 2,642 land deals, making rubber plantations 8.5% of all land deals granted (Schönweger et al. 2012).[68] All 18 of my case companies are quite different in terms of size and ownership (ranging from small family operations to large private and state corporations). All arrived in Laos within a very short time span of each other (most between 2005 and 2008) and all but three are registered participants of the Opium Replacement Program.

Once they arrived, all Chinese rubber investors struggled to gain access to land. As can be seen in Figure 4 below, most have been allocated a far smaller amounts of land (shown in grey and yellow) than was granted them according to their concession agreements (adjacent bars in blue).[69] Those companies that did gain access to nearly as much as they were granted either did so through contract farming arrangements or were granted extremely modest areas compared to other companies. All produce rubber for

[68] This is a very low estimate as many of the Chinese rubber companies invested through contract farming agreements which are still not regularly reported to the central government.

[69] Obtaining the original legal documents created when land was initially granted to companies was challenging and, in some cases, impossible. Most agreements were established, and land granted to companies in the 2000s when very few administrative offices in Laos used digitized record keeping systems, thus many original documents have been damaged or misplaced. Lao state officials may also avoid sharing records across ministries or administrative levels if they have reason to avoid oversight or accountability for the details of those deals.

export back to China, thus each first looked for land in the north of Laos, citing cheaper transport costs and proximity to China as their reasons. The subsequent three subsections describe the myriad reasons which have resulted in this considerable gap between areas granted to companies on paper and those allocated to them on the ground.

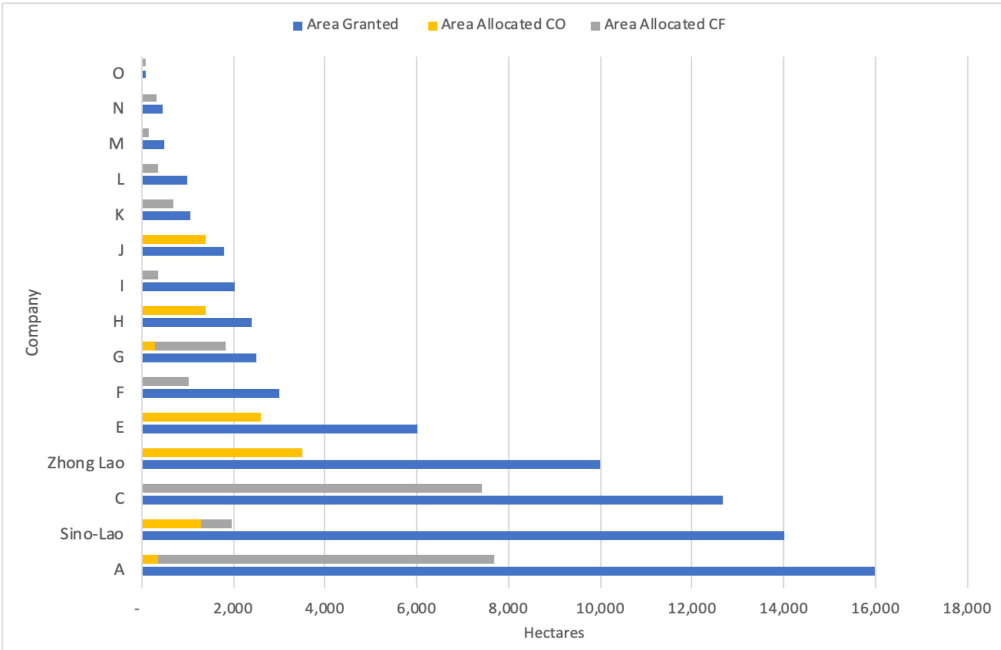

Figure 9. Areas Granted and Allocated per Company (CO=Concession; CF=Contract Farming)

4.4.1 Contract Farming and the Northern Laos Difference

The Lao rubber boom spread across the country in the 2000s, but the experience of northern Laos differed from that of other areas. This was, in part, because smallholder production predated large-scale corporate rubber investments (discussed in greater detail in Chapter 5), and also in part due to a decision by provincial leaders in the region to encourage investors to engage in contract farming instead of concession arrangements. Rubber was introduced in southern Laos around the same time but in the form of large-scale corporate plantations. These plantations were established by Vietnamese companies with extensive ties to Lao state officials at multiple levels (Baird 2011; Kenney-Lazar 2019; Kenney-Lazar et al. 2018). The state-owned Vietnam Rubber Group, for example, signed a contract with the Lao central government for an 8,650 ha concession in 2006 and had cleared and planted the full extent of the land granted through their contract within six years (Kenney-Lazar 2019). The company's holdings are in Savannakhet Province where two of my Chinese case companies sought land in the same year but struggled for years to access just over 1,000 ha for their rubber plantations. Further south, the Vietnamese Huang-An Gia Lai received concession contracts for a combination of nearly 40,000 ha through subsidiary companies in the mid-2000s (Global Witness 2013). It remains unclear why Vietnamese investors in southern Laos had so much more success both gaining contracts for and actually accessing land than did Chinese investors, but studies of these projects consistently emphasize the history of Vietnamese military support for the Pathet Lao as relevant to Vietnamese company success in negotiations for land (Baird 2010; Barney 2010; Hicks et al. 2009; M. Kenney-Lazar 2012; Obein, 2007; Obein, 2007). Authors of these studies note that the projects were backed, and often facilitated, by the Vietnamese government and were initiated at the central level in Laos where this history of military aid is continuously evoked to justify various cooperative projects and diplomatic initiatives.

The rubber investment context in northern Laos differs in a number of respects from that in southern Laos. As outlined in the Introduction, despite the discursive construction of the northern uplands as underdeveloped and politically unstable, the region has developed rapidly through cross-border links forged primarily at the province and district levels since the late 1990s. Northern Laos also experienced longer lasting rebel activities than other regions, and the Sino-Laos diplomatic relationship was only re-established in 1989, after a decade long break during the Sino-Vietnam War (Stuart-Fox, 2009) (discussed in Chapter 3). Yunnan state officials began assisting their counterparts in northern Laos in the 1990s, and by the year 2000 had reached an agreement with Luang Namtha provincial officials to establish the first Chinese rubber company in Laos: the Sino-Lao Rubber Company, a joint venture between two Chinese state-owned enterprises (one from Yunnan Province, one based in Beijing). In November 2000, a few months after this province level agreement was reached, China's Chairman Jiang Zemin conducted the country's first official diplomatic visit to Laos in history. One of the primary forms of cooperation suggested by Chairman Jiang was opening northern Laos to Chinese rubber investors like the Sino-Lao Company. The Lao central state agreed in principle to the plan. Four years later, after another Chinese diplomatic visit, the Lao central state went on to sign a more concrete agreement with Yunnan State Farms to facilitate the establishment of 2.5m mu (166,667 ha) of rubber plantations in northern Laos (Yunnan Daily, September 2005, cited in Shi 2008, p. 25). But the terms through which rubber would be established became a critical sticking point to negotiations.

After Chairman Jiang's visit, Lao central authorities agreed to permit the Sino-Lao Rubber Company to construct a latex processing factory in Luang Namtha. However, they decided to defer approval of the transfer of land to the company for plantation establishment until "there are no restrictions on [rubber] imports into China" (meeting minutes, November 2000 cited in Dwyer and Vongvisouk (2017) p. 99). Because rubber is considered a strategic resource in China, imports are taxed at a steep 37% in order to protect domestic producers. A few months later in early 2001, provincial officials in Luang Namtha moved forward with a vaguely described "cooperative rubber development project." The project would involve the provincial state "convincing upland farmers to give up swidden-based livelihoods and plant rubber"[70] and the company building a factory and buying, processing, and exporting Lao latex (Dwyer & Vongvisouk, 2017). But officials in the Provincial Agriculture and Forestry Office (PAFO) reported that the company insisted on having exclusive access to land through concession arrangements – not through contract farming or other forms of 'cooperation' with Lao farmers (cited in Shi 2008, p. 25).

[70] Swidden fallow or swidden cultivation is another term for shifting cultivation.

Over the next two years, branches of the Sino-Laos signed parallel agreements with the Provincial Governors of neighboring Oudomxay and Luang Prabang Provinces in an effort to fill the planned 300,000 ha agreement. Rubber investment before 2000 had been concentrated in Luang Namtha and the investors I interviewed all initially sought land there due to the easier transport options to the Chinese border. Thus, in the early 2000s, other provincial leaders believed that they had to court companies - they offered special allowances and promises of large quantities of land. The head of the Provincial Agriculture and Forestry Office (PAFO) in Luang Prabang recounted to me that, in 2004, it was clear to him and others in his province that Luang Namtha was getting rich with rubber and they were eager to follow suit. They invited rubber farmers from Had Nyao Village to share their experiences with the PAFO and some interested communities in Luang Prabang and also courted the Sino-Lao Company. The provincial governor at the time decided to offer 14,000 ha to Sino-Lao (far more than had been offered in Luang Namtha) and gave the company exclusive permission to operate in the two northernmost districts – Nambak and PakOu. This meant that no other companies would be allowed to operate in those districts. Lao state officials whom I interviewed in other places had also offered similar exclusivity agreements to the earliest companies to arrive. Company 5, for example, was the first to decide to invest in Oudomxay province and was promised at least 10,000 ha and exclusive access to two districts (Interview, Oudomxay, August 2017). This promise of exclusivity was later reversed, but the head investor of Company 8, which arrived last to the province in 2008, lamented that by the time he arrived, Lao officials and villagers alike were far less accommodating (Interview, Oudomxay, August 2017).

By 2005, however, the Sino-Lao agreement in Luang Namtha had become mired in a complex and opaque set of negotiations between the central level MAF, the governors of the involved provinces, and the company. These negotiations resulted in the decision by the Provincial Governors of three northern provinces (Bokeo, Oudomxay, Luang Namtha) to promote contract farming schemes over concessions. This was described in statements by MAF officials as a way of keeping land in the hands of Lao farmers instead of Chinese companies, thus ensuring the benefits of rubber would be shared with farmers instead of accruing solely to the company (Dwyer & Vongvisouk, 2017, p. 104). The decision to encourage contract farming instead of granting concessions was not taken up so widely in other regions. This had profound consequences for the rubber sector in northern Laos, particularly the experience of Chinese investors in gaining land. Many companies were still granted concessions – the agreement did not outlaw concession granting but rather encouraged contract farming as a more favorable arrangement. Contract Farming agreements have also not necessarily benefited local communities or spurred development in the ways expected (Douangsavanh et al. 2008; Southavilay, 2016), an issue examined more in Chapter 5.

4.4.2 Top-Down Granting and Contradicting Incentives: Lao state authorities at Different levels

The regulatory process for granting land described above evolved through policies and decrees at the central level. The decrees were aimed at establishing a clear hierarchy in the power to grant land from the central down to the provincial and district levels, limiting how much land Province and District level authorities could grant, and asserting central level oversight of all land deals granted. Chinese investors took this to suggest that, as is typical in China, the higher up in the Lao state hierarchy they were granted land, the more state support they would receive at all subsequent levels. A recurring theme among the private companies I interviewed was their envy of the fact that the Chinese Prime Minister had negotiated a deal for Yunnan State Farms with the Lao central government upon his visit in 2004. They viewed the large areas Yunnan was granted as proof of the advantage of higher-level Lao state approval. Many tried early on to find connections in Vientiane through the Chinese embassy and other means, only to give up. Most used Chinese brokers established in the northern Laos who lacked central state connections and found business in Vientiane difficult to navigate on their own.

Such a hierarchical, centralized process of land granting, however, was rarely followed in practice. It contradicted the previously decentralized practice of allowing local level authorities to auction off timber and other resource extraction rights to companies in exchange for infrastructural development. More importantly, the new regulations lacked mechanisms to incentivize or enforce vertical cooperation, and myriad political divisions within the state created obstacles to communication and collaboration throughout.

The experience of Yunnan Natural Rubber, the Lao branch of Yunnan State Farms (see Chapter 1), demonstrates the implications this divided state structure had on the foreign companies. In 2004, Chinese Prime Minister Wu Yi visited and negotiated with the Lao central government to have 166,667 ha of land (2.5 million mu) granted to Yunnan Natural Rubber – one third of which would be company concession, two thirds of which would be under contract farming. Four provinces – Luang Namtha, Oudomxay, Bokeo, and Sayabouri – were charged with finding land for the company. While operating across four different provinces initially seemed like a strong strategy for gaining a large amount of land, Yunnan managers reported extensive inconsistencies in terms of regulatory requirements and ease of doing business across the provinces. They have had to build new relationships in each location – a process they describe as costly, time consuming and highly inefficient.

In 2005, the company went about establishing a processing factory in Luang Namtha where smallholders were already tapping but the company had considerable difficulty getting land. Not until two years after the Chinese Prime Minister's visit did the company finally obtain a contract for a 320 ha concession just beyond a village near the provincial capital. Villagers were livid to find their fallow forest[71] given away, but when they insisted on compensation, district officials would only recognize impacted rice paddy areas as eligible for compensation. When the villagers pushed back, the company agreed to provide them enough free rubber seedlings to plant roughly 15 ha of land. Parallel agreements were signed for the provision of 6,000 ha of concession and 5,000 ha contract farming in Viengphouka District, and for 12,000 ha in Long district. But of these agreements none have come to fruition and both company representatives and state officials I interviewed claimed not to know why they failed to materialize, other than that

[71] Fallow refers to plots in a shifting cultivation system which are left to regrow between more intensive cultivation cycles.

the areas cited seemed unrealistic. The company has succeeded in establishing a scattered handful of plots under contract farming agreements but managers interviewed complained bitterly that they obtained these through cumbersome negotiations with individual villages with little state support (Interview, Luang Namtha, December 2012).[72]

Companies that were granted contracts at the province level experienced similar delays at lower levels. The branch of Sino-Lao in Luang Prabang province was granted 7,000 ha in two different districts by the Provincial Governor at the time but has given up on efforts to work in the second district. Company representatives described the District Agriculture and Forestry Office (DAFO) there as actively avoiding supporting the company, and the plantation areas the company established were vehemently opposed by local communities. Multiple villages completely prevented the company from gaining land nearby, while others lobbied various offices at the district level for years (McAllister, 2015). Finally, in 2012, villagers convinced a new district governor that the land had been obtained without going through the legal property channels, and the company has ceased operating in the district since (*ibid*). In the second district, district officials chafe at the company's exclusive contract to operate. When I introduced myself to the head of the DAFO, he asked me for suggestions as to how the district government might get around or justify breaking this agreement between the former Provincial Governor and the company. Company representatives feared this and had begun patrolling the roads along which they had invested, searching for independent latex collectors suspected of buying latex from farmers contracted to sell to the company (explored in detail in Chapter 5).

These tensions between state authorities at different levels placed considerable pressure on the central government to better manage the rapid proliferation of foreign land investments across the country. In May 2007, the Prime Minister established a moratorium on granting any new mining or tree plantation land concessions or deals over 100 ha. The stated purpose of the moratorium was to improve the regulation of land deals, which were often granted by province and district governments, seen as having exceeded central level capacity for oversight (Vientiane Times 2007 cited in [Dwyer, 2007, p. 1)). Subsequent moratoriums were issued in 2009 and 2012 citing the same objectives of improving systems of oversight (Vientiane Times 2012) and have been interpreted as efforts to recentralize concession granting (Baird, 2012). The 2009 Moratorium was shortly followed by a Prime Ministerial Decree (No. 135) clarifying the limits on the maximum areas that different state agencies could grant (see Figure 5 below).

Provincial level authorities, however, tended to interpret and adhere to these moratoriums loosely and inconsistently. In many cases, province or district level authorities had already granted concessions much larger than allowed at their levels. In response to the series of moratoriums and the increased scrutiny they engendered, at least two of my case companies (including LongYun and Company 17) were instructed to go to Vientiane and register their projects as new investments even though they were already well under way. In the recent update of the National Inventory of State Land Leases and

[72] I was unable to visit Yunnan's plantations in other provinces but the company representatives in Luang Namtha reported experiencing similar obstacles and obtaining comparatively small concession and contract farming parcels there.

Concessions (Hett et al. 2020), central level authorities are listed as the primary granting authority for a number of my case companies. The corresponding dates of granting are years after the dates that these companies signed agreements with sub-national authorities, as I learned through interviews and collected legal records. This disparity between the National Inventory records and my interview data suggests that LongYun was one of many companies for whom central level approval was only sought after investments were well under way. Thus, central level approval may often reflect an exercise on paper rather than the enforceable authority of central state authorities in practice.

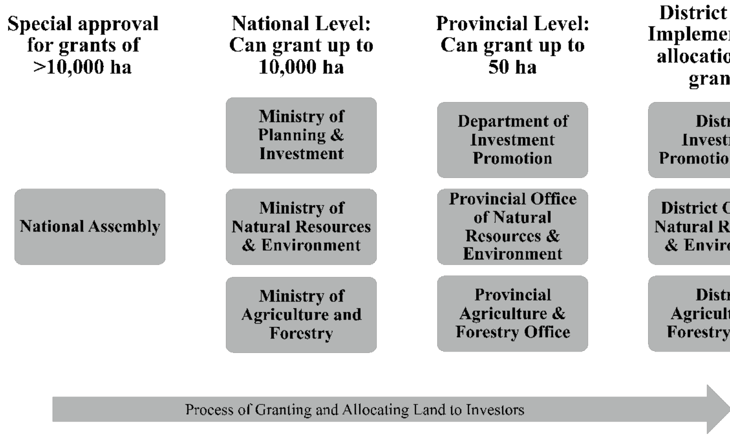

Figure 10. The Process of Granting Land according to Prime Ministerial Decree No. 135, 25 May 2009

4.4.3 Obstacles to Allocation: the unrewarded role of District level authorities

Once land deals are granted, the incentives for Lao state authorities to support companies in actually accessing and developing the land are considerably reduced. Legal documents collected for case companies show that, once concessions were granted, the granting authorities had little involvement in the deals they had established beyond occasionally issuing written requests for other state authorities to cooperate with the company. As a result, myriad obstacles arose to obtaining land granted. Most of these obstacles stemmed from the fact that land is surveyed after concession agreements are granted, and by District officials who have little agency in the granting process. Regardless of at which level concessions were granted, the majority of land management tasks (e.g. surveying land, informing villagers, conflict mediation, etc.) and the final land allocation was carried out at the district level. When Chinese companies arrived in District offices demanding land granted to them by higher authorities, district authorities were understandably less than cooperative. Concession fees and taxes go to the central level, whereas the district level is left to address most of the challenges and negative impacts that may potentially arise from foreign land acquisitions.

By law, land surveys and feasibility and environmental impact assessments should be conducted before the concession is granted. Because no national cadaster or other comprehensive data exists on land use and zoning in Laos, land surveys are vital for determining land availability. In almost all cases, surveys were conducted only after the concession agreement was signed – with only limited or no prior negotiation or coordination with lower levels of government or villages. Only Company 17 performed land surveys before officially applying for land, and these surveys were done by the company itself to determine climatic and soil suitability, not to check for conflicting land claims or zoning issues. When district staff did carry out land surveying and negotiations with local land users, as described in the LongYun case, companies were expected to finance these activities. Companies were taken aback that their concession fees would not cover these services, but this practice likely reflects the fact that those fees were almost always paid at other levels of government in Laos.

Chinese investors also expected the Lao central government to drive the allocation process. The plantation manager of Company 17 insisted that, "when we foreign enterprises come here to develop, [the Lao state] should think how they can help sustain us and help us accomplish things quickly. Only when a foreign enterprise does a good job will they bring up the local people." His belief that his company's investment would help the area develop and should therefore be better supported by Lao authorities was echoed across the Chinese investors I interviewed. Company 10 shared the same expectation, which was described by the Head of the Provincial office of Planning and Investment (PPI) in the granting province as a misunderstanding. The company had been granted a contract for a 500 ha concession in each of the five districts (2,500 ha total) in the province and had even paid province level granting authorities concession fees for the full 2,500 ha extent of land granted. As the Head of PPI explained, the company "understood that the province would find the land for them, and only later realized that they had to find it by themselves. However, by the time they started there was no land available," (Interview, Vientiane, May 2012). The Deputy Head of the Provincial Office of Natural Resources and Development, in slight contrast, recounted asking his district level counterparts to continue helping the company search for land, but when they responded that they could not find any more available land for the company, he concluded that "we have to accept reality" (Interview, Vientiane, June 2013). After two years filing official complaints, the company was refunded some of the concession fees it paid for land not allocated, and provincial officials suggested the company could seek villages interested in contract farming and sign agreements with them directly but discontinued the search for more concession land to allocate to the company.

Finally, a number of companies have run into challenges at the village level surrounding compensation payments, land conflict grievances, and acts of resistance and sabotage. State lands granted to investors are rarely state-owned in practice, in the sense of being demarcated and uncontested. Much land in Laos which has been zoned as forest and therefore state land, or which has yet to be titled, remains occupied, seasonally used, or managed collectively (Bourgoin & Castella, 2011). Most villages were not consulted until after concessions were granted, and most felt unable to refuse the concession (though, as in the case of Sino-Lao in Luang Prabang, some villagers have been successful in resisting). Company representatives portrayed negotiations with villagers as complex, time consuming, and costly (companies typically had to pay salaries for any Lao state officials who accompanied them to village negotiations). Sometimes companies refused to pay compensation to local land users on the basis that they were told the land granted belonged to the state and had already paid state authorities concession fees accordingly. Company 10 and LongYun both refused to pay compensation initially but have experienced retaliatory destruction of rubber seedlings and many more companies have come into conflict with nearby land users who purportedly set fire to plantation areas.[73] To investors, these village level negotiations and conflicts result in a range of delays, additional costs and reputational risks, and constitute one more point in the process during which they are reliant on Lao state authorities to facilitate their access to land.

4.5 Conclusions

Chinese companies arrived in Laos in the 2000s expecting to easily gain access to large amounts of empty, available land. They expected strong state support for their contributions to the establishment of a crop championed by both Chinese and Lao state leaders. Instead, the companies have struggled to navigate the complexities, contingencies, and layered systems of land use and resource access that the Lao state considers undesirable and illegitimate, and that foreign investors are not likely to understand.

The process of obtaining land in Laos appeared to Chinese investors as top-down, facilitated by strong Lao state support and the convenient abundance of available arable land. I have shown, however, that within the Lao state, actors at multiple levels hold differing territorial agendas. The long standing projects of stabilizing shifting cultivation, resettling upland communities, and emptying forests to facilitate state claims to those lands continue to be pursued by Lao state actors across provinces and ministries. But the process of granting land to Chinese rubber investors also reveals the persistence of internal contradictions and vertical and horizontal competition among state agencies over the power to grant land and manage foreign capital. As a result, what is granted by various agencies on paper rarely guaranteed companies land access in practice. Instead, companies are forced to engage multiple state actors through varying processes and stages of negotiation.

The ways these land deals unfolded on the ground differed from what Chinese investors initially expected. Oftentimes, what determined different outcomes for a company like LongYun, which obtained considerable amounts of concession land, and other less successful companies lay in the complexities of Lao land politics, which are rooted in complex histories of both widespread but informal practices and the formal structures of state land regulations. And contrary to their expectation of top-down state support, investors who sought high level political connections were no more successful at accessing land than those who approached villages and lower level state actors. In fact, more time and money were often expended by companies taking a top-down approach.

Thus, I conclude that Chinese rubber investments were welcomed and encouraged by the Lao state as a new source of non-state funding for the ongoing project of state territorialization in Laos. Although central state actors may have established national policies on land granting and signed agreements with a number of Chinese companies directly, sub-national actors also coopt and reconfigure the plans of both the central

[73] Though such incidents often inflict considerable damage on trees in plantation areas, this often occurs unintentionally as a result of burning to prepare land for shifting cultivation and is also a common point of conflict beyond the rubber sector.

government and Chinese investors for their own purposes. The case of Chinese agribusiness investments in Laos shows how local and transnational actors must navigate competing interests and visions of territorial control. This is not a case of weak governance per se, but rather a case of many partial, yet robust, power brokers exercising limited sovereignty across the Lao state's fragmented territory.

5 Latex Stealers and Lazy Laborers: Challenges to company control in the tapping phase

5.1 Introduction

The chief of NamNoy Village was upset, just as all three other village representatives I interviewed the prior day had been. Villages along both sides of the road grew rubber under a variety of arrangements. When Sino-Lao Company arrived in 2004 with a concession contract granted by the provincial governor, many households had already been planting their own small rubber plots since the early 2000s, albeit slowly. The company had been allocated a number of concession plots by the District Office of Agriculture and Forestry (DAFO) but, by 2011, state officials "could find no more land" for the company. Based on suggestions offered by DAFO officials, the company resorted to establishing contract farming agreements wherever they could convince villagers to join in the scheme.

Agreements the company signed with contract farming households and concession wage workers state that latex[74] tapped from trees on company concession and contract farming land is to be sold directly to the company. The company weighs and collects the latex that workers and contract farmers tap, pays them based on the market price minus its agreed upon share of the proceeds, processes the latex into dried sheets and blocks, and markets them in China. Unlike contract farmers, smallholders are not contractually obligated to sell to the company, but company representatives have recently begun obstructing the entry of competing latex collectors, to the ire of the villagers in the area.

A few weeks before, a Lao latex collector had visited each village along the road, offering to collect their latex at better prices than what Sino-Lao offered. Athu, the collector, was the son of Mr. Kham, an early La pioneer of rubber in the area. The village chief described Mr. Kham with admiration, calling him a shrewd entrepreneur as one of the largest smallholder producers in the district. Mr. Kham owned a little blue pickup truck which he used to transport his latex to the Yunnan Natural Rubber factory in Luang Namtha six hours away. Athu and Mr. Kham now planned to collect other smallholders' latex in the district and, based upon the high volumes he would deliver, hoped to negotiate better sale prices with the factory owner.

Athu's visits generated much excitement among the other rubber farmers, but just as he was discussing collection prices with the village chief, Sino-Lao representatives arrived. They "chased away" Athu, as the chief of NamNoy put it, declaring that his visit violated an agreement between the former provincial governor and the company that Sino-Lao was the only company that could operate in the district. The representatives

[74] As indicated in the introductory chapter, when rubber is initially tapped, tappers harvest the liquid latex that flows out of the tree. I use the term 'latex,' which technically refers to a milky liquid which a wide range of plants excrete when cut, to refer to rubber before being processed, when it is in its raw, liquid form or cup lumps or tub lumps, which are coagulated but not yet processed raw rubber. This helps me to distinguish between tapped latex and rubber trees.

accused the village chief of trying to break the agreement's terms and threatened to get district officials involved. In an interview later that week, the owner of Sino-Lao would tell me proudly that he had now assigned one of his Chinese plantation managers to watch the road for independent collectors, or "latex stealers"[75] as he called them.

A few days after interviewing the chief of NamNoy, I spotted a blue pickup truck parked outside the phở shop near my guest house. I rushed over to find Mr. Kham having breakfast inside. When I asked him about Sino-Lao's agreement with the provincial governor, he looked at me with a mischievous grin. He knew they had permission to exclude other companies from operating in the area, and Athu had even taken photos of the company's agreement. He had carefully read the agreement, which declared that no other company would be given state permission to operate in the district, but he reasoned that this hardly applied to him. The agreement did not specify what was meant by "company" or "operate." "I'm not a company, am I?" he asked and shrugged. Moreover, Sino-Lao's contract farming and concession holdings were surrounded by smallholder rubber, and smallholders are free to sell to whoever they want. In his view, there was no basis for the company to prevent him – an independent Lao farmer who lived in the district – from collecting from other smallholders in that area. When I suggested how easy it would be for him to also collect from the contract farmers or concession tappers, who I knew were eager to avoid giving the company its cut of the rubber they tapped, he smiled mischievously again. He replied that it was not up to him to remember who had their own rubber and who had contract farming agreements with the company – that was for the company to sort out themselves!

Although large areas of northern Laos are now carpeted with rubber, plots are owned and managed under a variety of different arrangements. As in the villages working with Sino-Lao described above, however, these areas often consist of plots under differing ownership and production arrangements that have been established side by side. Of the 37 villages I visited that host company rubber investments (either concession or contract farming), over half also have smallholder rubber planted near or adjacent to company plots. Only nine villages hosted solely company concession, without having established any contract farming or smallholder plots on other tracts of village land. Even where companies have overcome the challenges to obtaining land concessions (described in Chapter 4), their concession plots tend to be scattered amongst a multitude of other village land holdings, thus coexisting with other rubber production arrangements.

The mosaic of company and smallholder rubber in northern Laos is a very different spatial organization of production from that found in Yunnan and other places where large-scale plantations dominate. Yunnan State Farms' (YSF) rubber holdings in China constitute expansive, contiguous estates established long before smallholders and private companies entered the Yunnan rubber sector. Those YSF plantations mirror the socio-spatial structures of colonial-era rubber estate plantations in other parts of Southeast Asia: extensive, consolidated land holdings that facilitate managers' control of labor, supervision of production activities, and maintenance of other centralized systems of surveillance and accounting. Chinese investors initially sought to establish such concession territories in Laos but only a few were successful in obtaining concession

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[75] *Toujiaozhe* 偷胶着

agreements at all, and only LongYun Company (introduced in Chapter 4) obtained a contiguous concession of considerable scale (around 4,000 ha). As a result, most company rubber holdings reflect a spatial configuration like Sino-Lao's, with company concession, contract farming, and smallholder plots interspersed across the landscape, often within the same village territory.

The tensions between Sino-Lao company and Mr. Kham point to a newly emerging territorial terrain of struggle and negotiation between Chinese investors and other actors in the Lao rubber sector, exacerbated by the heterogeneity of the Lao rubber landscape. While smallholders began planting rubber in northern Laos in the 1990s, the majority of company rubber trees were planted during a rubber boom in 2005-2010. Plantation establishment is followed by a long wait for rubber trees to reach tapping age, seven-to-nine years after planting. Due to this time lag between plantation establishment and the production phase, almost all existing studies on rubber in Laos focus on this initial stage of plantation establishment but do not address the production phase which only began for most plantations in the 2010s. Tapping has meant the start of new activities including tapping, collecting, processing, and export. With those activities, new social connections and relations of power around production and market access have emerged. The Lao rubber sector's shift into the tapping phase has thus catalyzed considerable changes to dynamics of agrarian production where rubber is grown. In this chapter, I explore the ways in which the establishment of company rubber plantations discussed in Chapter 4 has resulted in a fragmented mixture of rubber producing arrangements including concessions, a variety of contract farming systems, and smallholder cultivation. I discuss how this heterogeneity the political process of granting land for rubber investments, and historical contingencies of where and why rubber was established in Laos have determined the market relations between Chinese companies and Lao producers and labor in the tapping phase.

In this chapter, I assess the spatial and territorial dimensions of varied modes of rubber production in northern Laos. I focus on the ways that spatial heterogeneity produced by the variety of land-labor regimes for producing rubber has affected the ability of Chinese companies to monopolize the flow of latex to the Chinese market. I argue that the spatial distribution of rubber holdings — specifically the interspersing of smallholder rubber farms and swidden fallows with company plantation holdings and clusters of contract farmers — has fragmented the Chinese companies' land holdings and challenged their control over flows of latex from Laos to China.

In the next section, I discuss the policies and market conditions which give Chinese companies control over processing and export activities in Laos but show that this control is contingent on companies' ability to produce or procure latex. Since the mid-2010s, the production of latex in Laos has slowed due to poor rubber prices and, because workers are typically compensated based on the market value of what they tap, the recruitment of labor has become much more difficult for companies. I then consider how literature on the geography of plantation production and the political economy of adverse incorporation sheds light on what I observe in Laos. The fourth and fifth sections describe how Chinese rubber companies resort to accusations of Lao farmers' "laziness" and collectors' "thievery" in attempts to justify and recapture the contracted and uncontracted latex produced in the company's vicinity. I conclude with a summary of my findings and reflection on the ways in which the patchwork distribution of land holdings Chinese companies obtained differed from the large, contiguous plantations they sought. While I document the strategies company managers have used to recruit labor and reassert control over the flows of latex, I see their efforts as limited by the lack of Lao state support described in the previous chapter, and by the sheer logistical challenges resulting from the fragmentation of their holdings.

5.2 Policy and Market Context: Processing, Quotas, and Rubber Prices

After failing to obtain contiguous plantation areas at the scales they had hoped, Chinese companies still expected to earn reliable profits once tapping started by engaging in downstream activities. All investors I interviewed planned in generating income not only from collecting, processing, and exporting latex produced on their own concessions or under their contract farming agreements, but also by collecting from nearby smallholders. To facilitate this, most companies initially planned to construct their own processing factories in Laos once they were tapping and collecting enough latex to operate a factory.

Chinese investors enjoy a number of advantages in their access to the Chinese market, most notably through the Opium Replacement Program (ORP) import quotas as discussed in Chapters 3 and 4. All but one of the companies I studied had access to these quotas. As discussed above, China consumes over 40% of the natural rubber traded on the world market and almost all of the rubber produced in Laos (Bank, 2016). Foreign rubber imports to China are taxed by the Chinese central government at a steep 37% based on their status as a strategic resource in China and the state's commitment to protecting its domestic production base (Chapter 3). ORP import quotas permit companies to import a set amount of latex to China without having to pay the 37% import tax, thus giving participating Chinese companies privileged access to the Chinese rubber market. This has enabled Chinese investors to dominate rubber processing and export activities in Laos. I show, however, that investors still struggle to maintain and benefit from that access because they lack leverage over Lao laborers and the actual flows of latex.

The strong rubber market conditions present when companies first established rubber in Laos did not last. Rubber prices climbed throughout the 2000s and reached a historic high in 2010, and Chinese rubber investors established as much rubber as they could get land to plant it on. But in 2011 global rubber prices plummeted just before most Lao rubber reached production phase. Whereas smallholders who established rubber in the 1990s were tapping and earning around $1.33/kilo by the late 2000s, prices after 2011 have hovered between $0.33-$0.55/kilo. This has placed considerable strain on companies, particularly on their ability to recruit labor and therefore to access a steady supply of latex for export.

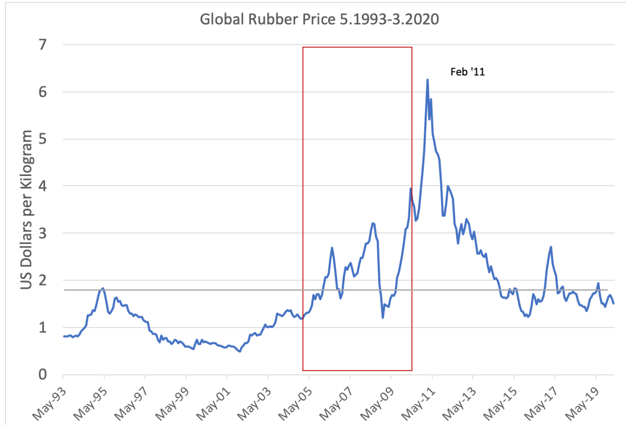

Figure 11. Rubber (Asia), RSS3 grade, Singapore Commodity Exchange Ltd. [76]

Companies' initial struggles to access land, as discussed in previous chapters, have been replaced by struggles to access labor and latex – struggles which have been exacerbated by the price drop. Companies with both concessions and contract farming struggle to recruit and retain laborers to tap their trees. Tappers are typically paid a share of the value of the latex they collect. The price drop has thus dramatically reduced tapping laborers' incomes to the point that they are often lower than other available rural wage work. Moreover, in northern Laos it is the availability of labor serves as a primary constraining factor in agricultural production. The land frontier also remains open in many places , and where Lao farmers can open new shifting cultivation plots, and these new plots further absorb considerable rural labor. As such, the conditions of availability of both land and labor constrain the production and control of latex in different ways.

Lao rubber farmers prioritize tapping rubber on their own smallholdings over seeking wage labor or tapping rubber on contract farms, in part because the company claims a portion of the selling price of rubber on its leased lands. Companies, in turn, try to either incentivize or compel workers to tap the companies' rubber on their plantations but have failed: many company fields are planted and mature, yet remain untapped. In addition, a range of actors – Chinese and Lao collectors, Lao processors, and even other Chinese companies – compete for latex from the surrounding smallholdings, and sometimes (as in the case of Mr. Kham and his son) from the companies' own contract farmers eager to circumvent their obligation to give the company its cut. Chinese companies react, as Sino-Lao did, by employing tactics like controlling and watching roads and establishing agreements with local state authorities to prevent other companies from operating in the same administrative area. Their tactics have yielded mixed results, and many of the terms of contract farming, labor compensation, and market access are being renegotiated.

After the 2011 price drop, ORP import quotas also went from being an advantage to a necessity. The lower prices dramatically reduced the profit margin on rubber production worldwide, which made the import tax a prohibitive barrier for any exporters in Laos without quotas. This included Chinese and Lao independent collectors, Lao

[76] The prices listed in this chart are for dry, processed rubber traded on the Singapore Commodity Exchange and are thus not equivalent to the prices cited in the text, which refer to farmgate prices in Laos for wet, unprocessed latex.

factories and plantation companies, and smallholder farmers living near the border who often transport small volumes of latex to personal contacts in China. Only Chinese companies with ORP quotas can export latex to China and hope to retain marginal profit margins. ORP companies have come to dominate processing and export activities as a result. Quotas are limited, however, and the amount a given ORP company is allocated is based loosely[77] on prior quantities of latex imported from Laos to China. The more a company imports in a given six-month period, the higher the quota they will receive for the next period. In other words, companies must collect and export a consistent supply of latex in order to maintain their privileged access to the Chinese market. The quota allocation system has created a scramble among ORP companies to collect and export as much latex as they can in order to maximize their access to future allocations of quotas, while the price drop has made it harder to recruit labor and compel contract farmers and smallholders to tap their trees.

5.3 Plantations, smallholders, and spatial control

In order to understand how Chinese companies have attempted to control labor and, in turn, latex flows in the rubber tapping phase, I turn to literature in agrarian studies which deals with the conditions under which smallholders engage in market-oriented agricultural production, particularly where capitalist agriculture is newly introduced. I also draw on scholarship which deals with spatial dynamics of plantation production and control as they relate to the conditions I have observed in northern Laos.

In the establishment of capitalist agriculture, particularly of plantation production, control over production is linked to the spatial organization of land, labor, and access to markets. In Marx's classic formulation of the advent of capitalism, primitive accumulation initiates the processes through which capitalist relations of production emerge (Marx 1867, 2004). Enclosures engendered the privatization of land, separated people from the means of production, and created a class of workers forced to sell their labor. This form of primitive accumulation, of complete enclosure or absolute dispossession as Arrighi et al. (2010) refer to it, demonstrates the conditions agribusiness investors often seek: extensive access to land and a supply of landless laborers who were recently dispossessed of their land. In colonial era Southeast Asia where rubber was introduced starting in the late 19th century, plantations were initially established in sparsely populated regions where the enclosure of vast areas of land intersected with colonial state projects of resource and population control (Stoler 1995). With the state's support, large-scale 'nucleus estate'[78] schemes were established (in Indonesia and Malaysia) under which state plantation corporations held large plots of rubber surrounded by smallholdings which received inputs and technical support from, and sold products back through, the corporation (Dove 2016).

In Indonesia, Dove (1985) shows that assessing and properly managing the "population/land balance" (p. 99) was central to the successful function of nucleus

[77] The exact parameters determining how much quota a company is allocated is not described in detail in any publicly available policy documents, and companies interviewed assert that political connections can result in more quota allocated.

[78] Also referred to broadly as nuclear estates (Dove 1985, p. 96).

estates. He noted that the post-independence Indonesian state, like the colonial rulers before it, massively misunderstood the availability of land in swidden fallow dominated regions by accounting for and compensating only what local communities planted in a given year and not the fallow lands they claimed and managed. As plantations were established by state plantation corporations in West Kalimantan (Dove's study area), this led to considerable resistance among the local indigenous population to what was perceived as wholly inadequate compensation for their land. Engaging in plantation work also often required moving to a new settlement within the plantation boundary. This posed a considerable risk as it would preclude the access local communities enjoyed in their existing villages to their long cultivated fruit and rubber tree groves and forest lands, which supplemented diets and incomes or could be cut to expand swidden cultivation (Dove 1986, pp. 8-9). As a result, state support was pivotal in producing and mobilizing a 'surplus' population of landless laborers in this and other Southeast Asian plantation contexts (Li 2010) just as the Chinese state mobilized Sent Down Youth and other Han migrants for Yunnan's State Farms (Chapter 2).

Once established, the spatial organization of the plantation facilitates control over production. Studies in labor geography highlight the significance of spatial control at multiple levels when it comes to maintaining a precarious, thus exploitable, body of labor. Duncan (2002), for example, suggests that the spatial layout of coffee plantations in British Ceylon was designed to enable "the use of space-time strategies of monitoring and control" by plantation managers, and therefore produced the desired "commodification and bureaucratisation of everyday life" (p. 317). The strategic use of space by plantation companies in the nucleus estate model has been studied and adapted in efforts to better manage labor and monitor production. For example, when Chinese investors sought land in Laos, they preferred large, consolidated land concessions not only because this reflected the Chinese State Farms model but also because they anticipated the managerial benefits that a large, contiguous plantation space provides.

Primitive accumulation, absolute dispossession and large-scale enclosures are not the only way in which capitalist forms of agricultural production expand and take hold. Capitalist agriculture has also been established by incorporating smallholder producers and through contract farming – two systems that exist alongside Chinese company rubber concessions in Laos. This incorporation without enclosure can have the effect of dispossession in place or adverse incorporation under conditions where firms retain control over the means of production. Smallholders may be forced to engage in production for the market for lack of other livelihood options, or what Li (2014) refers to as "markets-as-compulsion" (285). They may struggle to access expensive inputs for production or to engage in value-added activities like processing and are thus forced to access markets through agribusiness corporations under unfavorable conditions (Amanor, 2012). McCarthy (2010) suggests understanding this forced or unfavorable engagement in markets through the concept of "adverse incorporation," introduced by Hickey and du Toit (2007). He uses adverse incorporation to describe the integration of much of the rural population in Jambi, east Sumatra, into agribusiness dominated commodity chains as wage laborers or poor oil palm and rubber farmers "dependent on the oil palm economy and yet marginalized within it" (p. 827). The key to understanding the terms under which small farmers engage in commodity markets, McCarthy argues, lies in the degree to which local livelihoods are "enabled or constrained by longer standing economic, social, and political relations that vary over time and space" (p. 821). In the Lao rubber sector, the terms of smallholder engagement in rubber seem to depend, as McCarthy suggests, on how land allocation to corporations has proceeded and on their highly uneven and changing economic, social, and political relations.

Under some conditions, however, smallholder producers have advantages over agribusiness producers and have driven recent cash crop booms in coffee, shrimps, cocoa, and rubber (Hall, 2011). In studies of crop booms, particular attention has been paid to the materiality of specific crops, most notable to the physical characteristics and production cycle of a crop, which Hall et al. (2011, p. 88) argue are consequential for the terms of smallholder engagements with agribusinesses along agricultural commodity chains. Oil palm, for example, became known as "a rich farmer's crop" because cultivation involved costly inputs and fruit must be processed within 48 hours of harvest – a factor which favors vertically integrated corporate production models (McCarthy, 2010, p. 826). Rubber, in contrast, is considered a "quintessential smallholder crop" in that it is non-perishable (making rapid coordination with processors unnecessary), harvesting demands are flexible, and capital-intensive inputs (fertilizers, mechanical equipment) have less significant productivity yields than other crops (Byerlee, 2014, p. 579). Rubber is also easily intercropped, grows on marginal soils, can thrive in "weedy, agroforestry-type environments" requiring less regular management, and can be processed and preserved with simple, inexpensive equipment (Dove, 2016). The preference for growing rubber under the large-scale estate plantation mode, Dove concludes, "reflects the pivotal role of the estate sector in national economies and the government bias in favour of more centralized and 'legible' production systems (Scott 1998), which contrasts to the smallholder system" rather than any weaknesses in smallholder production (p. 2).

In the Lao rubber sector, smallholders are incorporated under both adverse and desirable conditions. Many farmers have been compelled to engage in the rubber sector under exploitative terms, particularly when company concessions like that of LongYun's described below have enclosed village territories. Others have pursued rubber on their own terms, as did many during an initial wave of smallholder rubber establishment described in the next section. The case of Chinese rubber investments in Laos highlights the need in these debates to consider how forms of spatial control mediate the terms of smallholder incorporation, and how companies resort to other strategies when the traditional plantation configurations of space are unavailable to them.

In the remainder of this chapter, I analyze what difference it makes that Chinese plantations in Laos are surrounded by other rubber regimes (i.e., smallholder cultivation and contract farming). I show how the heterogeneous landscape of northern Laos has generated openings and opportunities for various actors to resist adverse incorporation and force Chinese companies to use other approaches for asserting spatial control.

5.4 Emergence of a Mosaic of Rubber land-labor regimes

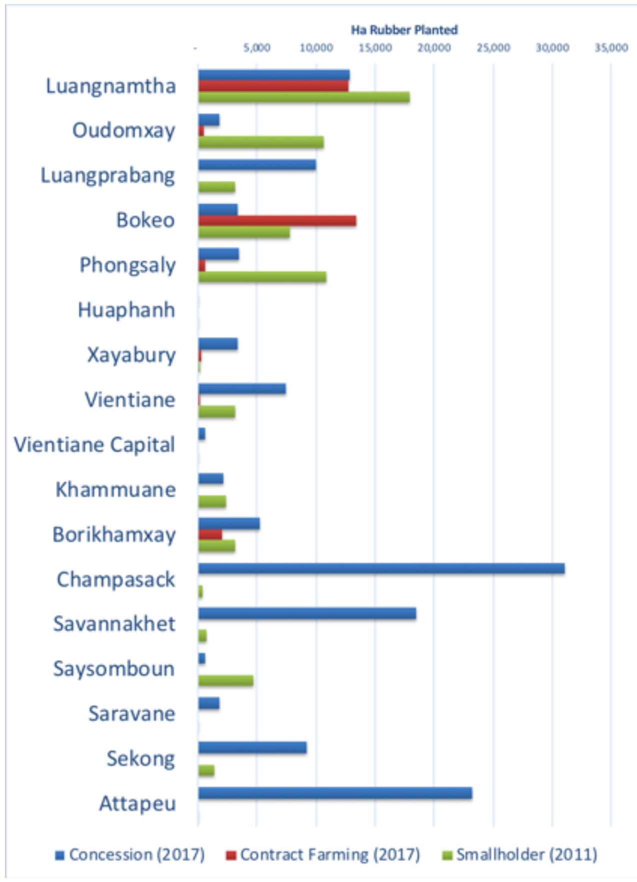

Figure 12. Distribution of smallholdings (green), company concessions (blue), and contract farming (red) across provinces, based on Author's analysis of the CDE LCI 2015 combined with the Agricultural Census of Laos 2018.

The patchwork of rubber arrangements into which Chinese investments are integrated in northern Laos contrasts that found in central and southern Laos. In 2012, the Lao Agricultural Census Office estimated that 281,772 ha of rubber had been planted across the country (MAF 2012). Of this area, the National Agriculture and Forestry Research Institute estimates that only 46% was under concession contracts with companies, with another 24% under contract farming arrangements, and 30% grown by smallholder Lao rubber farmers nationwide (Vongkhamor 2016, cited in Kenney-Lazar et al. [2018]). Most rubber in southern Laos is owned by Vietnamese investors who were granted large-scale plantation concessions, while contract farming was primarily promoted in northern Laos (described in Chapter 4). Figure 2 above shows the prevalence of rubber smallholdings, contract farming,[79] and company concessions in each province in Laos arranged roughly from north to south. Figure 3 shows a map of the distribution of

[79] Although the National Agriculture and Forestry Research Institute estimates the total area of contract farming, there are currently no reliable data on the spatial distribution of rubber contract farming by province, thus Figure 2 is based on incomplete estimates from the LCI 2015 cited. Nevertheless, because contract farming was promoted through province level agreements to prioritize that arrangement over granting concessions (described in Chapter 4) the conclusion that contract farming is more prevalent in the north and little to none exists in southern Laos can be considered reliable.

smallholder rubber, which is clearly concentrated in the north, particularly near the border with China. In this section, I describe how the heterogeneous mix of different rubber cultivation arrangements I observed in my fieldwork emerged in northern Laos.

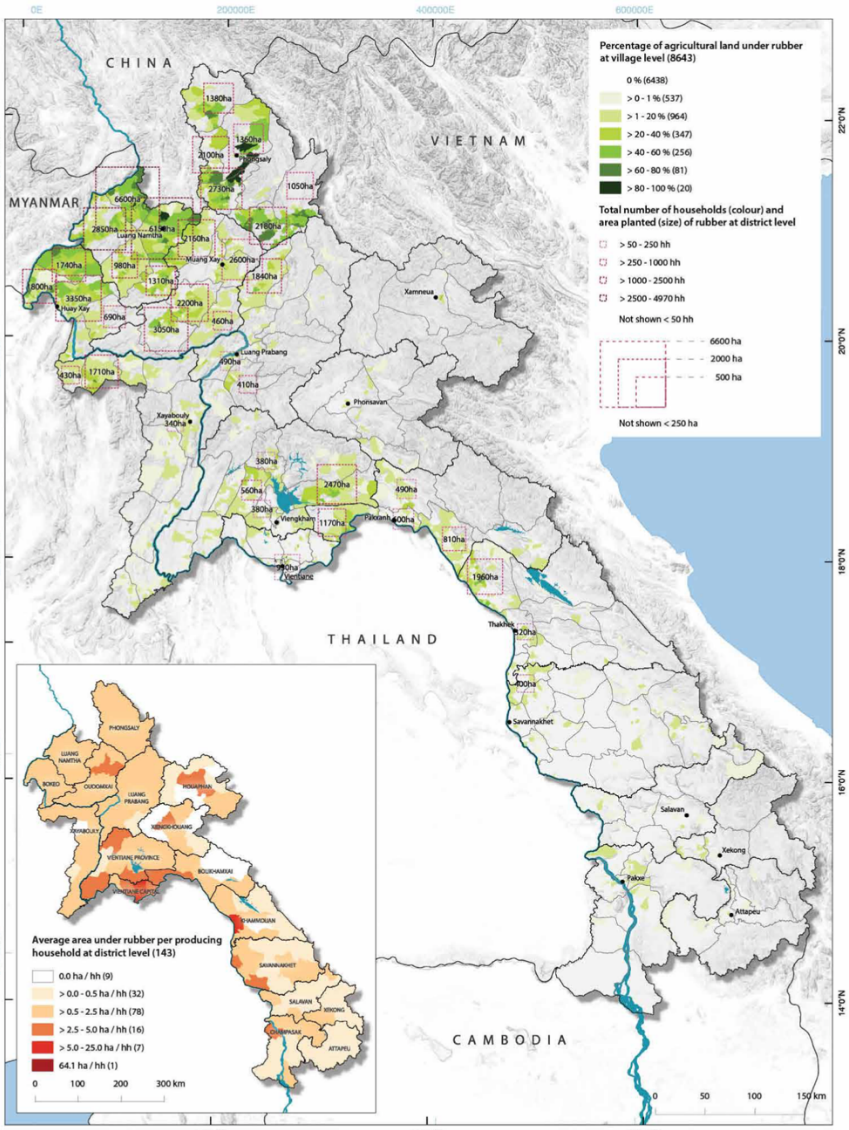

Figure 13. Map of smallholder rubber across Laos, concentrated in northern Laos, published in the Atlas of agriculture in the Lao PDR (Epprecht et al. 2018)

5.4.1 Smallholder Rubber Establishment

Rubber has been eagerly taken up by a range of actors in northern Laos. It was initially established by smallholders, mainly Lao refugees who had fled the violent conflicts of the Lao civil war to China and Thailand during the 1960s-1970s and returned in the early 1990s. As refugees returned, they reclaimed the lands they had left or were allocated new lands by the Lao state, and brought back with them decades of work experience in rubber plantations in China and stories of wealth amassed by their rubber cultivating relatives across the border (Baird & Vue, 2015; Shi, 2008). Many planted rubber on their own or newly acquired land.

The appeal of rubber as a new cash crop quickly caught on by word of mouth. Other farmers, sometimes even entire villages across the region, began visiting these rubber pioneers, learning to plant and manage the new crop and establishing it on their own lands. By 2003, with support from agricultural extension workers from Yunnan, provincial officials in Luang Namtha organized a credit program for establishing rubber with 12 villages near the border (Shi, 2008, p. 12). The Lao Agricultural Promotion Bank granted villagers low interest loans to buy rubber seedlings (Interview, Luang Namtha, August 2020). Farmers as far as three provinces away told me about their visits to Had Nyao village in Luang Namtha Province, the village now widely known for pioneering rubber in northern Laos, to learn how to cultivate the crop (Interview, Luang Prabang, July 2017).

Other social groups beyond these refugees were also instrumental in the spread of rubber across northern Laos by using their connections in China to obtain and sell rubber seedlings to other smallholders in Laos. Mr. Gao, who I met in Luang Prabang, identifies as ‘Ho,’ a term used to differentiate the descendants of Yunnanese traders who had settled in Laos multiple generations ago from recent Chinese migrants who did not grow up in Laos (Bouté, 2018, p. 2). While Mr. Gao started with very little capital, by the mid-2000s he had earned enough to pool with 20 other relatives to buy 50 ha of land allowing them to collectively establish their own rubber holdings. He and his co-investors also conducted their own informal study tours to China to learn management and tapping techniques and establish relationships with buyers across the border (Interview, Luang Prabang, July 2017).

Mr. Kham, introduced at the start of this chapter, had also started growing rubber in 2004 after he became friends with Mr. Ja. Mr. Ja is Hmong[80] and his family fled to Thailand from northern Laos when he was young and later resettled in China. They returned to Laos in the late 1990s and were relocated by the Lao state to Mr. Kham’s village. The two men became fast friends and took trips to China together starting in 2003, bringing back as many rubber seedlings as they could to establish a rubber seedling nursery. Over the years, Mr. Kham gradually bought small plots of land nearby and planted 40 ha of rubber which he manages with members of his extended family. Other households in their village bought rubber seedlings from Mr. Kham and Mr. Ja and established a total of 74 ha of their own smallholdings. Once the trees reached tapping age in the late 2000s, these smallholders began to enjoy growing incomes from their rubber. Now, when prices are good they sometimes hire workers from nearby villages to tend their considerable rubber smallholdings, and when the rubber price is low they tap the trees themselves or leave the trees untapped as they wait for prices to rise.

The smallholder rubber plots predating Chinese company investments were thus sizeable though spatially dispersed. Farmers could rarely afford to establish large-scale

[80] The Hmong are an ethnic group in Southeast Asia and Southern China. Many Hmong formed resistance factions against the Communist Pathet Lao during the Lao civil war. As a result, many fled once the Pathet Lao took power in 1975. The United Nations High Commission for Refugees negotiated the repatriation of 60,000 Lao refugees from Thailand in 1991, a large portion of whom where Hmong.

contiguous plantations all at once, and instead planted bit by bit. And because rubber takes so many years to mature, most of it was planted on remote fallow plots located far beyond household food gardens which need to be more frequently tended. These networks of smallholder producers and their accumulation and investment of capital, inputs, and knowledge would come to shape Chinese companies' search for land in different ways.

5.4.2 Company Land Selection, Contract Farming, and Compensation

The rubber investments of all but two of the 18 companies whose representatives I interviewed constituted their first investments in Laos or anywhere outside of China. Unfamiliar with the country, many companies sought Lao or Lao-based Chinese brokers to help them find land. Others relied upon Lao state officials to facilitate their investment and to identify suitable land for the company. Many of the brokers and Lao state officials did not grow rubber at the time and were therefore unsure of what growing conditions were best for rubber. Consequently, many company investors stated in interviews that they started to search for land in villages that were already growing some rubber. They explained that the existence of smallholder rubber was one of the only indications they had that the area was suitable for it. The presence of smallholder rubber was also interpreted as indicative that nearby communities might be interested in and capable of providing the company with labor. "The villagers there were capable of cultivating rubber, they already knew how to grow it" remarked one District Agriculture and Forestry Office official when asked how land was identified for investors (Interview, Luang Namtha, August 2017). It was, therefore, not a coincidence that smallholder rubber had already been established in over half of the villages I visited where Chinese companies also invested.

Conflicts between villagers and companies also contributed to the patchwork of rubber holdings. As described in Chapter 3, state officials most frequently allocated the shifting cultivation lands to companies because, while local land users relied upon those lands for staple crop production, were not typically titled under the LFAP. When land with annual crops still growing on it was allocated, state officials typically required companies to compensate villagers for their lost harvests. Compensation was rarely paid for the land. Where villagers remained unhappy with the outcomes of state mediation, companies typically refused to compensate them, referring to the lands as state forest, but might offer them free rubber seedlings as informal compensation.

Once rubber plots were established by companies, smallholders often established even more rubber plots of their own. Seeing lands nearby enclosed by company rubber, many Lao farmers have rushed to claim the remaining areas of land. Whereas shifting cultivation is not formally given land titles, rubber was actively promoted by the Lao state and tree plantations granted tax breaks, thus many Lao farmers have planted rubber as a strategy for staking claim to land (Dwyer & Vongvisouk 2017). The use of tree crops by smallholders to claim land is a common practice (Hall et al. 2011, p. 96), and means that rubber was planted for this purpose often regardless of the local availability of labor or market signals.

Contract farming arrangements also often resulted in more heterogeneous rubber territories. Contract farming was heavily promoted in northern Laos, and the decision by four northern provinces to encourage companies to establish state-brokered contract farming schemes instead of concessions was reinforced after the 2009 moratorium on large-scale land concessions when provincial authorities were barred from granting concessions but no regulatory constraints on contract farming agreements were established (see Chapter 3). Some companies still obtained small concessions labeled either as tree nurseries or demonstration gardens. Others were granted contracts for land concessions but were then prevented by the moratorium or by bureaucratic delays and other obstacles from getting the full extent of those concession contracts fulfilled by state surveyors (described more extensively in Chapter 3). These companies turned to the option of establishing contract farming, typically in areas surrounding their existing concession areas.

Two types of contract farming arrangements have emerged in northern Laos. Under what is referred to as "2+3 Contract Farming," farmers provide the (1) land and (2) labor and the company provides (1) capital (seedlings and tapping equipment), (2) technology (training and management), and (3) market access (the company buys the latex tapped and takes care of processing and export). The company takes a share of the income from whatever latex is tapped (typically 30-45%). This is the most common arrangement in the villages working with Sino-Lao, and when the company approached them, villages often left it up to individual households to decide whether to use some of their own land to engage in contract farming. Individual families would examine their land holdings, select an area of fallow to allocate for rubber, and plant seedlings provided by the company. Where 2+3 contract farming was established in this way, companies keep records of the number of rubber seedlings given to a household but may not know exactly where the corresponding plots lie (Figure 4).

In other places, 1+4 contract farming arrangements were established instead. Under 1+4 contract farming, villagers retain their control of the land, but the company pays them for their labor inputs in the planting and maintenance phase. Farmers provide the (1) land while the company pays for (1) labor and provides (2) capital, (3) technology, and market (4) access. Moreover, instead of splitting proceeds from the latex tapped, farmers 'divide the trees' with the company. For example, if 4,500 trees had been planted on 10 ha of village land, the company would take over the management of an agreed upon portion (e.g. 2,250 trees or 5 ha) and the village would either collectively manage their portion or split it across households involved.[81]

[81] This arrangement has been referred to as 'concession-like' because companies manage their portion of the trees as they would concession areas (hiring wage laborers to tap and controlling the income from the latex themselves) although technically the land remains in the hands of the villagers (Shi 2008; Dwyer & Vongvisouk 2017; Kenney-Lazar 2009, 2012). This approach has raised questions of villagers' tenure security for the land on which company trees are planted. I encountered conflicting interpretations among Lao state officials interviewed regarding who would own the land after the productive life of the trees. Written contracts do not address the point either, but companies and villagers both expected the land to revert back to the village afterwards.

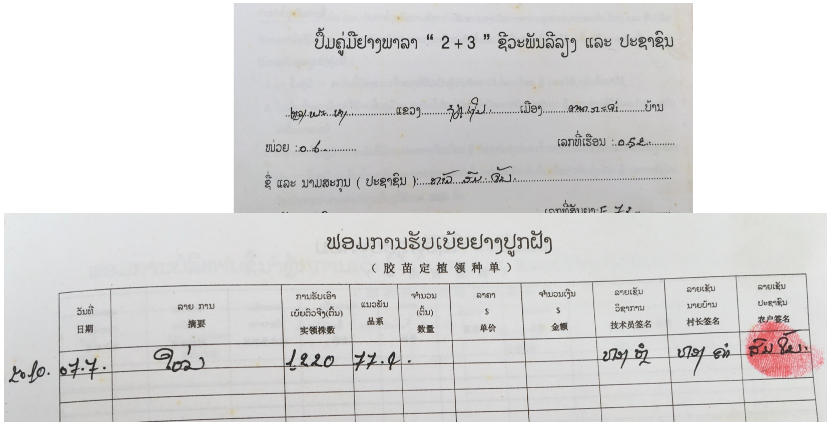

Figure 14. Company Register of Contract Farming Households, Luang Prabang Province

Throughout the tapping phase, then, the dynamics of latex supply and Chinese market demand affecting the Chinese investors I study are shaped by the fact that the land frontier remains open and that many Lao farmers retained considerable land holdings of their own. The spatially dispersed patterns through which contract farming has been established also render companies' own rubber holdings less legible and more difficult to manage and monitor than anyone but the surrounding villagers who know the terrain and boundaries well. These patterns of rubber establishment greatly impact labor and market access dynamics in the tapping phase.

5.5 "Lazy Laborers": Company Failures to Recruit Tapping Labor

"I can't say they're lazy, they're not lazy … But it takes three Lao to do the work of one Chinese. And once they get paid, they don't come back until they need money again. They're not reliable (不可靠)!"

- Chinese rubber company owner, Oudomxay, July 2017

When Chinese companies first established their plots, they hired workers from the surrounding areas, sometimes entire villages, to prepare land and plant trees. As the trees were left to grow from years 2-6, labor demands dropped to a minimum and a few workers would be hired to weed around the rubber saplings once or twice per year. But once trees reach maturity (typically year 7-10), they demand steady and labor-intensive management. Through the ten-month tapping season (March through December), rubber trees are tapped every 2-3 days early in the morning, their latex collected later in the day or left until the next tapping cycle to coagulate. The companies included in my study have planted between 100 and 4,000 ha, with an average of 450 trees per ha, which means they will need to hire between 33 and 1,300 full-time tappers by the time all of their trees reach maturity. This is in a country with one of the lowest population densities in Asia – less than one person (0.28) per ha – and a predominantly rural population still heavily engaged in shifting cultivation (Lao Statistics Bureau 2016). As such, it is unsurprising that labor scarcity has become an issue for Chinese investors.

LongYun Company (introduced in Chapter 3) is the exception that proves the rule. The company obtained a large concession through its partnership with the Luang Namtha provincial army and has faced very few challenges recruiting labor. The three villages near LongYun's concession (discussed in Chapter 3) were resettled from the uplands to their current locations along the Mekong River in the 1990s, under the Lao state's ongoing focal sites resettlement program. During the land concession surveying phase, villagers asked the company to refrain from establishing rubber within 2 kilometers of the river and to leave any villager planted plots untouched by the company. Instead, the company has ignored this request and extended its plantation territory from the surrounding hills down to the village residence areas and now pins the three communities between the banks of the Mekong and a sea of company rubber. The plantation has overtaken most village fallow and communal forest lands leaving the villagers heavily reliant on company employment for their livelihoods. In the most heavily affected village, only 10 of the 44 households still have enough land to practice shifting cultivation, and all have given up raising buffalo and any livestock other than chickens and pigs.

Initially, the villagers grumbled at the low pay provided for the heavy work of establishing terraces and planting rubber along the hills they had considered their own. Furthermore, after the planting stage, work opportunities were limited to weeding twice per year. Having thus lost their household shifting cultivation and collective forest lands to the company, many young men were forced to leave for other provinces or across the river in Myanmar in search of wage work. Even though LongYun began tapping its trees in 2017, it offered far lower cuts of the proceeds from tapping as compensation for the work than other companies I encountered. The company's exclusive control over the plantation area, and the fact that rubber has dispossessed villagers of the land they relied on for their livelihoods has served to tie the surrounding communities to the company. This is a form of adverse incorporation in McCarthy's (2010) terms. In contrast, recruiting labor is far more difficult in other areas where companies' holdings are widely disbursed across communities that have retained access to their own land.

Since 2010, companies have begun to claim a lack of labor in northern Laos. They repeat the same mantra they once used when searching for land: "China has very little land and much labor, Laos has much land and little labor."[82] But when interrogated, their struggles are best described as difficulties to recruit and pay labor, rather than the scarcity of laborers themselves. Rubber tappers are, in China, Laos, and many places across the region, compensated for tapping by receiving some portion of the proceeds from the latex they tap. Smallholders capture all the value whereas in most contract farming arrangements, tappers get around 70% of the value of the latex they tap. Smallholders as potential laborers therefore wait until their own trees are tapped.

Since the global rubber price dropped in 2011, the value of latex has significantly decreased. This in turn has made tapping incomes drop and, consequently, made other types of agricultural work more appealing. I listened to many Chinese company representatives complain of inefficient and unreliable workers, but it was clear that laborers in northern Laos have a number of more lucrative options. The company manager quoted at the start of this section, who cursed the inefficiency of Lao labor, soon acquiesced and admitted to me that banana plantation investors were hiring wage labor at $11/day whereas he could only pay villagers to weed or tap at around $4.50-5.50/day, and that this was significantly impacting his business (Interview, Oudomxay, August

[82] 中国人多地少，老挝人少地多！

2017). Since the rubber price drop, a number of other crops including bananas, a new wave of sugarcane, pineapples, and watermelon have spread throughout northern Laos. As mentioned, one of the primary alternatives available to Lao rural workforce is to farm their own rubber. Under 1+4 contract farming arrangements, the company is responsible for recruiting its own tappers after trees are divided with the village. Most companies entered into these arrangements expecting that the villages adjacent to their concessions would tap the company's trees. Companies have organized paid training sessions for laborers to learn rubber tapping techniques, only to have participants return to their own plots and apply their new skills with little interest in wage work with the company. Under 2+3, where contract farming involved splitting latex, many companies have faced dual challenges of compelling nearby villages to tap and claiming the company cut of the outputs. The drop in latex prices, which have recovered since 2011 but remain far lower than when rubber was established in the 2000s, has further disincentivized tapping where companies are promised a contract farming cut. In the Sino-Lao case, it was widely acknowledged by state officials, company representatives, and sometimes villagers that latex tapped under contract farming agreements was frequently sold through other channels in order to avoid giving the company's cut.

Finally, some companies admitted that they initially planned to bring Chinese laborers to close the labor gap when they initially requested large areas of land. Lao labor laws, which were written into almost all of the contracts I obtained, require that a minimum of 85% of a company's labor must be Lao. In contrast, Vietnamese agribusiness investors in Southern Laos have been shown to regularly violate these laws and utilize imported Vietnamese labor especially for projects located close to the border (Zurflueh 2013). LongYun and other companies located close to the border also recruited Chinese workers from border areas who hold border permits for temporary travel granted only to citizens residing in border districts by the Lao and Chinese governments. Even with these permits, all company managers I asked said few Chinese workers were interested in coming. One former work team supervisor I met attributed this to a combination of slightly higher salaries in China, the hardship of living in Laos, and the cost of traveling frequently back to China (a requirement of the border permits, which are not meant to allow permanent residence), making the recruitment of Chinese workers too costly for most companies (Interview, Xishuangbanna, March 2017). He described life on the LongYun plantation "lonely and bitter" and did not regret giving up working there. Moreover, company representatives and two Lao police officers I interviewed cited increasingly stringent Lao state enforcement of fees for employing foreign labor without proper permits. One police officer shared, with a laugh, that once his team knew a company was employing non-permitted Chinese labor, they made sure to visit the plantation every week to collect fees and bribes until the company sent their workers home (Interview, Luang Namtha, August 2015).

Recruiting Lao workers from districts or provinces beyond where their plantations are located has also been difficult. Some villagers that I interviewed in Luang Namtha worked as labor recruiters for nearby companies, contacting relatives in other districts to send family members seeking wage work (Interview, Luang Prabang, July 2017). But in order to host travelling laborers, companies needed to provide them with dormitory housing, which proved difficult where plantation holdings were scattered amongst village land. Workers from other regions in Laos are often treated with suspicion and were thus not welcome to reside anywhere near established villages. Interviewees in multiple villages told me of pigs and chickens they suspected plantation workers had stolen or conflicts arising when plantation workers damaged crops when crossing through village fields to access company rubber plots. And since plantation workers are recruited to tap for the full ten-month tapping period (March through December) each year, local police bureaus in Luang Namtha and Luang Prabang have proposed that companies must register outside workers and apply for permission to reside there (Interview, Luang Prabang, July 2017; Interview, Luang Namtha, July 2015). All of these raise the cost of recruiting labor for the company and make the compensation for rubber tapping far less appealing to rural wage laborers.

The dispersed spatial configurations of company rubber holdings are thus directly connected to challenges of recruiting labor and, as I discuss in the next section, of Chinese companies' efforts at controlling latex flows and benefiting from their privileged market access.

5.6 "Latex Stealers": Company Strategies of Spatial Control

Sino-Lao arrived in Luang Prabang Province in 2004, the same year Mr. Kham started planting rubber. The company took its concession agreement, signed by the provincial governor, to the District Agriculture and Forestry Office (DAFO) for help in locating available land. The agreement gave the company rights to develop 7,000 ha of rubber concession in the district, but the company experienced considerable resistance both from communities and district state officials who insisted there simply was not enough available land to fulfill the contract. The only area the DAFO officials finally procured for the company was a 200 ha tract of land far in the hills above HouayHit Village. A large part of the land given as concession was already being used by Khmu residents who had been resettled from the uplands a decade before but "had no livelihoods," as a DAFO official I interviewed phrased it in reference to their lack of cash income.[83] The rest of the concession land was allocated from untitled fallow between HouayHit and the next village. The other villagers, all of whom were Thai Leu (the dominant ethnic group in Laos), had already begun planting rubber on their own land and refused the company's offer even to engage in contract farming. Sino-Lao was also allocated a few other concession plots for far smaller areas (20-30 ha) of unregistered communal land in villages up the road, but eventually gave up on demanding concession land and turned to seeking contract farming agreements with villages throughout the area.

The head of Sino-Lao, Mr. He, estimated that between the small concession plots and their contract farming the company has established 3,000 ha of rubber in the district. Almost all of their plots are located along the same road, built and regularly paved by a

[83] As discussed in the previous chapter, the Lao state has had a widely criticized policy of resettling remote villages in more accessible, lowland areas since the 1980s. The primary problem has been that, for a range of reasons often rooted in the state's provision of an inadequate amount or quality of land, resettled communities have struggled to eke out sufficient livelihoods. Since the 2000s, state agencies have therefore encouraged engagement in rubber and other cash crops as a way of providing livelihood opportunities and discouraging resettled villagers from returning to the uplands when they struggled to cope with new conditions where they had been resettled.

Chinese hydropower company that owns a dam under construction a few kilometers in. In my interview with him, Mr. He insisted on showing me the factory they were constructing at the head of the road. He and Mr. Li, his plantation manager, beamed as they observed the construction team's progress.

Figure 15. Mr. Li and Mr. He inspecting the construction of Sino-Lao's factory water pump

When I asked him later about his agreement with the province, however, Mr. He became stern and impatient, stating "We foresaw all this hassle when we started!" He explained that companies would never agree to contract farming agreements in China, they simply knew it would be too hard to ensure the contract farmers would sell the tapped latex through the company in perpetuity.[84] When rubber is collected, farmers haul their blocks of dried cup lumps from their rubber plots down to the roadsides to wait for collectors to weigh, record, and compensate them for their latex (see Figure 16 below). With contract farming, concession, and smallholder plots interspersed in the area and no way of distinguishing the source of latex once hauled from plots to the road, all actors involved suspected it would be difficult to prevent Mr. Kham, the independent collector and smallholder, from collecting from contract farmers eager to capture the full 100% of the earnings from the latex they tapped instead of giving Sino-Lao its 30% share.

[84] Assessing the merits and equity of contract farming systems as they have been established in the Lao rubber sector or comparing them to approaches in China and other countries is beyond the scope of my work. My field work and data collection focused on land politics and companies' production and market connections, not on the livelihood impacts of various arrangements. As such, it should be pointed out that this read of contract farming is particularly reflective of the company perspective. In many other contexts (including in Laos in the production of other types of crops) contract farming involves the exchange of inputs for some form of future repayment when production begins, but that repayment is typically quantified and limited. The contract farming agreements established in some cases in the Lao rubber sector (excluding those in which trees were split after a few years of growth) guarantee the company a cut from farmer latex earnings in perpetuity which ties the company to the farmers in more long-term ways but also requires the company to defend its claims to the latex perpetually. In one case I encountered where such contract farming agreements were established between a Lao-Chinese joint venture, the company had reckoned with the impossibility of claiming its cut of latex proceeds by calculating the value of the inputs it had already provided (seedlings, training, collecting bowls, and tapping knives) and allowing farmers to repay the company for those inputs in order to get out of their contracted responsibility to sell only through the company.

Figure 16. Latex collection in Luang Namtha Province

With few other options for obtaining more land, however, he had made certain to negotiate an exclusive contract for that district with the provincial governor at the time. Mr. He had also taken comfort in the fact that the company's holdings were all lined up along the same road. "This makes things easier to control" he explained, tracing the road down the map to where it met the district's main highway. He jabbed his finger just where the two roads met and proudly explained that that was the location of the factory we had just visited – strategically located where transport was easy, and it was possible to watch for "latex stealers," like Mr. Kham.

Sino-Lao thus anticipated the difficulties it would face controlling latex flows from all villages surrounding its holdings, as did many other companies. Mr. He admitted that he had planned to lose 20% of the latex produced from his contract farming agreements but "what can you do?" he shrugged. The villagers insisted that smallholders should have the right to sell to anyone they chose and, along with Mr. Kham, had sent a complaint all the way up to the National Assembly. Mr. Kham was eager to use his own connections to the Chinese factory in Luang Namtha to help them do so. And if he were able to collect from smallholders in the area, Mr. He portrayed his efforts to keep Mr. Kham and other collectors out despite surrounding communities' protests as a matter of protecting his investment as much as possible. Otherwise, he would never be able to pay his workers and keep the business alive, he claimed. Mr. Kham, meanwhile, had not begun openly defying the company's demand that he stay out of the area with his little blue pickup truck, but he insisted to me that their control over that area would not hold as long as he was offering prices $0.06/kilo higher than Sino-Lao.

Other companies had the same foresight when establishing their plantations and took similar measures of spatial control. Two of the earliest companies in Oudomxay and Luang Namtha provinces also established their plots along the same road in hopes of being able to more easily monitor goings on and watch for latex stealers. WenLi, who manages his father's plantations in Luang Namtha (see Mr. Wen, Introduction) complained bitterly about the independent collectors who would enter 'his' plantation areas to buy from the contract farmers whom his company had agreements with. On one hand, this motivated him to be more responsive to farmers with whom he had agreements. He made sure to collect rubber from them twice a month even if there was not enough to fill his trucks, and he told his managers to watch the road for them. Still collectors would come, and he told me – half bragging – “Those small guys who come around and steal my latex, they know I’ll beat them up if I catch them!”

5.7 Conclusions

The northern Laos context is not conducive to the establishment of large-scale company plantations which Chinese rubber investors sought when they came to the country in the late 2000s. The landscape is mountainous and formal documentation and mapping remain limited; thus, it is illegible to many foreign companies. For the most part, local systems of production and land use are flexible, still characterized by the population’s general access to land for shifting cultivation and therefore to livelihoods beyond rubber. This allows local land users to avoid engaging in wage labor for companies. Because they possess their own ties to sources of inputs and latex purchasing links in China, many do not need to rely on Chinese companies to access the rubber sector, nor to accept the terms of contract farming or concession agreements; smallholders-turned-collectors like Mr. Gao, Mr. Kham and his son Athu, and the smallholders in Had Nyao and across the region have been successful at latex production on their own. Moreover, company rubber holdings are fragmented, a reality that the businessmen did not know to plan for when making their plans to work in Laos. Squeezed onto smaller areas, stuck between preexisting smallholdings and other land uses, these fragmented plantations do not conform to any kind of ideal conditions for plantation efficiency, company control, or profitability. The patchwork rubber production landscape also precludes companies from exercising control over labor and from monopolizing the flows of latex back to China from the areas they have tried to control.

Companies who have been most successful at navigating and asserting control over this illegible landscape (e.g. LongYun and Sino-Lao) have relied on Lao state support to procure land or to establish monopsonies or other kinds of territorial market controls. The other companies I interviewed representatives from have been less successful at such controls. They are also caught up in a significantly competitive environment: competing for land and spatial control with villager and corporate entities alike, as well as vying amongst one another and with new marketing entrepreneurs (like Mr. Kham and his son) to acquire the most latex to sell to China. On the one hand, the Lao state has not defended companies when growers violate their marketing contracts. On the other hand, the Chinese state has provided ORP companies with import quotas that give them an advantage over other exporters but has designed the terms of quota allocation in ways that intensify competition between ORP companies and reduce the investors’ profit margins. This competition between companies derives from multiple factors: their struggle to access land in the first place, the price drop, companies’ challenges recruiting labor, and the quota system’s allocation based on previous imports. Ultimately, the existence of smallholdings, the availability of other land and livelihoods for laborers, and the rise of independent collectors weakens company control.

In the end, these efforts at spatial control – monitoring plantation areas for latex stealers and extracting state agreements to exclude competitors – are still reliant on Lao state support. Company claims to rights to latex produced on their contract farming lands, or to monopsony rights to certain districts or administrative areas based on formal agreements with land holders or the Lao state, are only as strong as state officials' willingness to recognize and enforce those claims. Moreover, company efforts to exert spatial control over their production areas or to discipline or attract labor will be less and less practical as tapping expands and the different actors engaged in the rubber trade consequently multiply in Laos. But the threat of latex stealers has also forced companies to engage more cooperatively and flexibly with the communities in which they work. After lowering his fist, WenLi admitted to me that threatening encroaching collectors was not, so far, a very successful strategy. Instead, he had found greater success through simply making more frequent, reliably scheduled trips to his contracted villages to collect their rubber and promising set prices for latex ahead of time. This is equally important for companies with factories, because they typically build factories at capacities slightly over their own expected supply, thus they rely on collecting from nearby smallholders to ensure their factory efficiency and profits. Even where smallholders engage in rubber under initially undesirable terms, these terms have shifted because companies' quota driven demand for latex exceeds what companies can produce themselves.

In this chapter, I have shown that in the northern Laos borderland, smallholder rubber production rivals plantation production in efficiency and productivity. Plantation rubber requires access to quantities of cheap labor, as well as extensive and contiguous expanses of land *or* a state willing to manufacture those conditions for companies. The Lao state has only provided a small part of this for Chinese investors. Where smallholders are expected to be adversely incorporated into agricultural commodity markets, especially when agribusiness actors control market access as Chinese rubber companies do in Laos, I have shown that in the Lao borderlands, the spatial configurations of production have enabled smallholders and other workers to withhold their labor from companies and to sell latex to independent collectors, giving smallholders both bargaining power and enabling them to benefit from rubber production by outsiders on Lao land.

6 For Profit or Patriotism? Chinese State Capital in the Lao Rubber Sector

6.1 Introduction

> We may be Yunnan State Farms, but we represent all of China. We are our national government's representative. We can't just consider our business. It doesn't matter if in the process we encounter difficulties, we are a state-owned enterprise. Even if we go five more years without earning money, we still have to persist! We can't turn back! But also … we believe that if we persist to the end, we'll eventually earn money.
>
> - Yunnan State Farms Manager, Luang Namtha, Laos, March 2017

There is a persistent narrative among Chinese rubber companies in Laos that their investments are more than business ventures. They insist that rubber is also a form of development cooperation extended from China into Laos, where they claim the crop will spur rural development. As the epitaph above suggests, no firm claims this commitment to contributing to development ideals beyond its own profit as vehemently as Yunnan State Farms (YSF), the only Chinese state-owned enterprise operating in the sector, and this claim has helped it gain considerable influence in the Lao rubber sector. Not only does it now control most of the operating rubber processing factories in the country, but it has come to be recognized by the Lao state as not just another profit-driven company but as a committed development partner. In this chapter, I explore what Lee (2017) refers to as the "encompassing set of imperatives" Chinese state capital must attend to as it invests abroad (p. 28). State investors, Lee argues, are expected by the Chinese state to not only to pursue profit but also to contribute to state projects of extending China's geopolitical influence, contributing to development in host countries, and gaining access to strategic raw materials. The expectation that the activities and investments of Chinese firms will contribute to state imperatives is accompanied by multiple forms of Chinese state support, but I show that this support has limited benefits to firms operating in the rubber sector in Laos. Moreover, I argue that firms can be seen as contributing to state imperatives in a variety of ways, from simply representing China in a positive light, to engaging in state-directed development cooperation initiatives, to directly responding to state directives. As such, there remains considerable latitude in how this expectation is interpreted and met by firms. It is therefore up to those firms to navigate and reposition themselves as they invest abroad, through a complex process of embedding into the host country context, in order to take advantage of the benefits of Chinese state support while also aligning themselves strategically with host country interests.

YSF's path to success began with multiple ineffective approaches and resultant shifts in the company's approach to conducting business in Laos. When Chinese President Jiang Zemin visited Vientiane in 2004 and committed to the establishment of over 160,000 ha of rubber in northern Laos as a form of Sino-Lao development cooperation, YSF appeared to have gained a windfall in new territory on which to expand its rubber plantation holdings dramatically. This agreement positioned YSF to lead what would become a remarkable a boom in rubber expansion in Laos. After decades of lacking land for expansion in Yunnan and losing footing in an increasingly competitive and rapidly changing domestic rubber sector, expansion into Laos could return YSF to its previous prominence as a primary supplier to the Chinese rubber market.

YSF's initial reliance on central-to-central state diplomatic agreements, however, proved more of a weakness than a strength and its expectation that these agreements meant the commitment of strong Lao state support for and facilitation of their operations proved unfounded. In the decentralized context of Lao political networks and control over land (Chapter 4), YSF's top-down approach to gaining access to land raised far more obstacles than it opened doors. Private companies that approached provincial level state authorities directly (often before or without ever contacting central authorities) were often granted land concessions far larger than those which YSF obtained. By the end of the rubber boom in 2010, YSF was left with a weak combination of an expensive investment in a processing factory with very little of its own plantation land to supply it.

The global price of rubber then dropped in 2011, and the impact was felt across private and state investors in the Lao rubber sector. Just as rubber trees were reaching production age, the predicted incomes from rubber were slashed and companies struggled to recruit labor to tap their plantations and to revise their financial plans around a far bleaker future. In this moment, the advantages YSF enjoyed as an SOE became particularly important. With its superior access to capital, it had been able to construct a rubber factory long before other companies, and the price drop further delayed other companies' plans for construction. Those which had obtained large areas of land sank considerable funds into plantation establishment, which had yet to begin production and would generate far less income than initially expected when prices were high.

The price drop also produced a shift in perceptions of YSF by the Lao government. Most companies decided to wait to begin tapping their trees until prices recovered, meaning the wage labor opportunities and revenue from taxes on production anticipated when rubber investments were established were delayed. Meanwhile, a number of Lao farmers began tapping despite the price drop, reliant on their own plots of rubber for a basic income. Unfortunately, there were very few factories to sell their rubber to, as most companies were waiting to scale up their own tapping activities investing in their own factories. Luckily YSF's factor had opened in 2005, and from then until 2014 when prices began to stabilize and other factories began to open, YSF's was the only factory continuously in operation in northern Laos. During this time the company built relationships with Lao farmers by establishing purchasing agreements with them, encouraged the organization of village level rubber groups which made coordination for collection more convenient for both parties, and eventually began to cultivate rapport with provincial and district level state authorities. When the Luang Namtha provincial government asked multiple Chinese factory owners to establish price floors in 2014, all three complied in principle but only YSF had the capacity and the overt political commitment to continue buying latex from farmers. As a result, the Lao government began to see and treat YSF as distinct from other Chinese rubber investors in Laos.

Since 2014, YSF has carefully cultivated its reputation as a leader in the Lao rubber sector and has connected its work to broader discourses of development cooperation. It has focused on developing relationships with Lao state leadership at multiple levels by hosting rubber sector meetings in Vientiane to which it has brought province level leaders. It also established an office in Vientiane devoted to the construction of an agricultural research center. These contributions to Sino-Lao development cooperation carry particular significance in the context of China's expanding effort to rebrand its investments in neighboring countries under the Belt and Road Initiative.[85]

In summary, YSF's status as an SOE did not immediately translate into or guarantee advantages in its investments in Laos. It required a process of trial and error, years of experiencing myriad obstacles and misunderstandings, for the firm to gain a sense of how to navigate the politics of investing in land and conducting business in Laos. In some senses the obstacles it faced were produced by the fact that it is an SOE, as this made YSF more conflict averse and more obligated to attend to political interests beyond its own bottom line. Through the process of embedding itself into and adapting based on experience to local business standards and norms and strategies for navigating Lao state politics at different levels, YSF has also been able to adapt its approach and better leverage its advantages, garner community buy in, and frame its activities strategically so that it could capitalize on the points at which Chinese and Lao state interests align with firm interests.

The experience of YSF in Laos exemplifies Lee's (2017) assertion that Chinese state capital "follows the logic of encompassing accumulation in that it seeks not only profits but also political patronage and influence" (p. x). I contribute to this concept by suggesting that the combination of support from and corresponding obligations to the Chinese state which characterize Chinese state capital creates both burdens and opportunities for firms like YSF. YSF initially struggled to get established, despite extensive support provided by the Chinese state. Since then, it has only been able to recover and reach a position of influence in the sector due to a shift in the ways it relates to the Lao state and has leveraged its advantages as a state-owned enterprise to weather a global downturn in rubber prices and to be flexible in meeting host country demands. Through this case, I show that the capacity of SOEs to access capital and other forms of state support, and to engage powerful discourses of development cooperation, have given

[85] The Belt and Road Initiative was announced by Chinese President Xi JinPing in 2013. Much debate exists over defining the Belt and Road Initiative, but it is most commonly referred to as a 'grand strategy' and initially focused on improving connectivity between China and the rest of the world through infrastructure development. Since then, however, an increasingly wide range of economic and development aid activity has been referred to under the umbrella of the Belt and Road.

YSF more flexibility to seek out synergies between its own business interests and the various Lao and Chinese state interests it is courting.

The next section examines Chinese policies and other mechanisms of state support and control that are meant to help and encourage firms investing abroad to also contribute to state interests. I then present the shifting strategies Yunnan State Farms has taken to investing in Laos. I examine the ways in which Chinese state support has influenced YSF's operations in Laos, and the degree to which this has set it apart from other Chinese rubber investors. I emphasize changes in YSF's decision making and performance as market and policy conditions shifted, and as it gained experience in Laos. I conclude by discussing how this case fits into understandings of what sets SOEs apart from private firms as investors and the link between the Chinese state and capital as firms invest overseas.

6.2 Chinese Capital Going Global

Understanding the link between the Chinese state and capital as it goes out is a question at the heart of struggles to characterize China's global integration. Despite having transitioned from a state-planned to a market-oriented economic system since 1980, the Chinese state still intervenes heavily in the economy and in the affairs of Chinese firms operating both domestically and abroad (McNally 2012, p. 744; Nee et al. 2007). Since the establishment of the Go Out Policy in 1999, moreover, Chinese investment overseas[86] has expanded and the relationship between the Chinese state and capital is changing as a result. As in the domestic sphere, different levels and institutions within the Chinese state provide support and policy incentives for firms investing abroad to help those firms compete. State support and incentives also encourage firms to contribute to the interests of the nation, from diplomacy to development cooperation to securing access to strategic resources and new markets. Still, the degree of state intervention is sporadic and selective, occurring far more in strategic sectors like rubber and differing across firms depending on their state ties. The nature of state intervention in firm affairs also takes many forms, including both the provision of support and intervention in decision-making.

The state intervenes in firm operations by providing carrots, such as subsidies and policy supports, and sticks, such as enacting punitive measures against or controls over firms. It also exercises direct and indirect forms of control from directly intervening in individual firm decision-making to establishing large-scale political imperatives like the Go Out Policy or the Belt and Road Initiative which encourage certain types of investments more broadly (see Jones & Zou 2017, p. 746 for an in-depth enumeration of state control mechanisms; and Rithmire 2019). Subsidies and policy support are provided unevenly and with a focus on strengthening strategic sectors and firms whose activities are considered important in a given time or context. Moreover, even where the state provides direct support, Gu (2011) points out that this support is often symbolic: that the

[86] I use the terms 'overseas investment,' 'foreign direct investment,' 'transnational investment' and 'cross-border investment' interchangeably to describe Chinese investments in other countries.

size of the financial sums contributed to firms is rarely significant, whereas policy bank lending constitutes a far more significant benefit to firms and is often reserved for central level, strategic SOEs. As for sticks and state control, Jones and Zou (2017) note evidence both for increased firm autonomy despite state efforts to monitor and control firm activities overseas, as well as for residual state control over firms operating abroad. They attribute this mixed evidence to the contradictory processes through which the Chinese party-state is transforming, and the relationship between the state and Chinese capital is changing as a result. On one hand, the state retains a notably authoritarian approach to overseeing Chinese firm activities through direct policy interventions. On the other hand, it has also been continuously undergoing processes of "uneven and contested fragmentation, decentralization and internationalization of state apparatuses" which undermine state coherence (745). This unevenness is compounded by an increasing diversity in firm behavior across sectors, and as firms move beyond China's borders they must adapt to new country contexts and forge relationships with host country governments.

Complicating this picture of the links between the Chinese state and companies is the country's approach to development cooperation and foreign aid. Traditional (OECD country) donors treat for-profit commercial activities as fundamentally at odds with the aims of modern development aid (Buckley 2013; Power & Mohan 2010). In contrast, the Chinese state depicts its approach as a form of South-South cooperation in which developing countries engage in mutually beneficial aid as an alternative to hegemonic approaches to aid (Girouard 2009; Ray et al. 2015). Some differences in how Chinese actors approach development aid are simply attributable to the fact that the country is relatively new to the sector and still adjusting to the standards and norms of traditional donors (DeBruyn 2013; Goldstein & Pusterla 2010). More fundamental differences in how the Chinese state approaches development aid also exist. In official policy discourses, Chinese central state officials draw an explicit link between the commercial interests of firms and the diplomatic and development aid objectives of the state (Amanor & Chichava 2016; Li et al. 2014; Nyíri & Tan 2017). They refer to a broad range of interventions, from state funded foreign aid and infrastructure projects to for-profit private investments, all under the umbrella of development cooperation (Brautigam 2011; Tan-Mullins et al. 2010). Chinese overseas investments across ownership categories are therefore regularly referred to in state discourses as linked to state development cooperation objectives, regardless of their functional links to the Chinese state.

Lee (2017) divides Chinese capital into Chinese state investment and all other investments, which she argues operate as any other forms of global private investment. That is, most Chinese firms, excluding those representing state investment, are driven by a capitalist logic prioritizing profit maximization. The "logic of encompassing accumulation," which she attributes to Chinese state capital, can be understood as a product both of these obligations to state objectives beyond the pursuit of profit maximization and corresponding state support for firms in their overseas investments. As a result of this logic, Chinese state capital tends be more flexible, "more sensitive and accommodating" to host country interests (Lee 2018, p. 55) and therefore to become more embedded in the economic, cultural, and political processes of the host country. Chinese state capital may also make market defying decisions, much as YSF appeased the Lao state's request for above-market price floors when the global rubber market plummeted after 2011. I therefore focus my analysis on exploring YSF's logic of accumulation as demonstrated by decision making at different points in the firms' development in Laos and under different political and market conditions.

Yunnan State Farms (YNSF) is a useful case for reflecting on this evolving state-capital relationship from the less explored perspective of province level state capital. Most central level SOEs work directly with the state ministries responsible for their sector and where the state intervenes to facilitate or oversee their investments overseas it is the central state that gets involved. Provincial level SOEs, in contrast, have become far more commercially oriented after years of decentralization, and are backed sometimes by provincial and sometimes by national authorities (Kaplinsky & Morris 2009). In some ways, its experience exemplifies the state support Chinese SOEs enjoy. Its initial entry into Laos was facilitated by high level diplomatic deals between Beijing and Vientiane, it invests primarily in rubber which is considered a strategic material to China, and it has been afforded certain advantages through Chinese state support. But whereas most of the literature focuses on central level SOEs, YNSF is a provincial level SOE, which means it responds to both national and provincial state interests. Thus YNSF contends with a specific set of challenges which at first it navigated poorly but eventually learned to use to its' advantage – by pitching its rubber investments as development cooperation, by garnering Lao state favor in different ways , and by playing into Yunnan's and Beijing's contrasting interests to extract market advantages for itself.

6.3 The State Capital Difference

"Call me *Lingdao* – Leader." Mr. Jia corrected me gently. "I'm not a boss, because we are not a company. We are a state-owned enterprise; we have no bosses." A manager for Yunnan Rubber Company, the Lao branch of Yunnan State farms (YSF), Mr. Jia spoke standard Mandarin and wore a smart collared shirt despite the heat. The company's headquarters had none of the signs or symbols of hands-on plantation work that the offices of other Chinese rubber investors had – no rubber saplings laid out across the concrete, no tapping tools left on tables or workers' laundry hanging. Instead of being established adjacent to its plantation areas, the YSF complex is located in a prominent area of the provincial capital of Luang Namtha. The buildings throughout the walled-in complex were adorned with long red banners with slogans encouraging teamwork, building the nation through rubber cultivation, and maintaining a good work ethic, just like those typically found in Chinese government buildings.

At the gate of the YSF headquarters in Luang Namtha Province, a large placard announced the company's name below the words "Opium Replacement Program" and images of the flags of the PR China and Lao PDR with two hands grasped in a handshake (Figure 17). Most Chinese rubber companies operating in Laos with Opium Replacement Program support post similar symbols of diplomatic cooperation, but the company representatives at YSF make a particular point of their role in Sino-Lao development cooperation.

Figure 17. Company sign (in Lao and Mandarin) for Yunnan State Farms' Lao branch, Yunnan Rubber Investment Co. Ltd. with "Opium Replacement Program" written above the company name.

Mr. Jia's insistence on being addressed as "leader" – a designation which emphasizes teamwork and service over hierarchy – was one of the many ways that representatives of YSF distinguished their firm from other Chinese rubber investors in Laos in interviews and meetings I observed. The contrasts between YSF and other Chinese companies operating in Laos are both ideological and organizational. Some are rooted in the state owned enterprise's history as an extension of central state authority in the Yunnan Borderlands and a representation of socialist ideals of modern agriculture and worker discipline. This history is carried forward and into the firm's operations in Laos through certain work rituals and the slogans hung around the YSF complex. Other contrasts between YSF and private Chinese rubber companies are more material, particularly its access to a deeper pool of resources – subsidies, loans, preferential marketing agreements, and bureaucratic support – than other companies. The approaches the firm has taken to obtaining land, doing business, and establishing political connections in Laos have been determined in part by how the material support they have received affected their capacity to cope with challenges and take advantage of opportunities, whereas the ideological commitments to Sino-Lao development cooperation structure their responsibilities and the outcomes they pursue. Both have changed over time according to shifting market and political circumstances.

6.3.1 The Limits to Central State Support

In the early 2000s, Sino-Lao diplomatic relations were beginning to improve rapidly after two decades of tension in the 1970s-80s. Both Beijing and Vientiane were eager to initiate more concrete cooperative development projects. November 2000 marked the first visit by a Chinese President to Laos, and among the development cooperation initiatives he established with the Lao state was an agreement for Chinese companies to support the expansion of rubber cultivation in Luang Namtha Province. China's Vice Prime Minister Wu Yi in 2004 extended those plans by signing a national agreement for the Lao government to provide Yunnan State Farms with 160,000 ha of land for the establishment of rubber plantations (Shi 2008; Interview, Luang Namtha, March 2012). This was the same year the ORP was funded by the central state in an attempt to stem the influx of opium cultivated across Yunnan's border. As a result, Chinese rubber investments in Laos have been promoted by Chinese and Lao state leaders as a form of development cooperation. As rubber prices reached a historic high in the late 2000s, rubber livelihoods were projected to lift communities in northern Lao shifting cultivators out of poverty and opium cultivation, and into commercial cash crop production just as the crop had done across the border in Xishuangbanna.

YSF entered Laos promptly after PM Wu Yi's visit in early 2005. At that point, the domestic State Farms system was saddled with debt, had limited channels for growth domestically, and was in desperate need of new territory to expand into. It had been struggling since the 1990s to support an increasing body of surplus labor on its rubber plantations while confronting reduced state support through the 2000s and pressure to privatize. Meanwhile, rising global rubber prices had encouraged independent rubber cultivators surrounding the State Farms to extend their own investments in rubber, while private companies had invested in their own processing factories which increasingly competed with the State Farms for latex. YSF approached government leaders in the four Lao provinces (Bokeo, Luang Namtha, Sayaburi and Luang Prabang) which the central level agreement had indicated for its 160,000 ha of rubber to be located, and began establishing its headquarters in the capital of Luang Namtha just forty minutes' drive from the Sino-Lao border along the newly developed Route 13.

But YSF was particularly unsuccessful in gaining access to land for establishing rubber plantations. The regulatory process for granting land to investors in Laos established a clear hierarchy from the central state level down to the provincial and district authorities. Central level oversight over all land deals was recognized in the Lao Land Law of 1999 and a National Land Management Authority established in 2005 was made responsible for the implementation of monitoring, approval, and evaluation procedures. During interviews conducted in 2012, both YSF managers and staff at other Chinese rubber companies viewed the large areas Yunnan was granted as proof of the advantage of higher-level Lao state approval and many pursued central level connections themselves.

Such a hierarchical, centralized process of land granting, however, was rarely followed in practice. It contradicted the previously decentralized practice of allowing local level authorities to auction off timber and other resource extraction rights to companies in exchange for infrastructural development (Dwyer 2007; Dwyer 2011; Kenney-Lazar et al. 2013). More importantly, the regulations asserting central state control and establishing the Land Management Authority lacked mechanisms to incentivize or enforce vertical cooperation. Myriad political divisions within the Lao state also created obstacles to communication and collaboration throughout the system of land regulation (Lu & Schönweger 2019).

During my first visit to YSF in 2012,[87] Mr. Jia described a litany of complaints and challenges he had about conducting business in Laos. He conveyed that the

[87]My 2012 interviews were conducted before the 2011 global price drop began fully affecting the rubber sector in Yunnan. Many purchasing contracts are signed in advance and as an SOE, YSF is a priority

government was difficult to work with and ineffective, that skilled labor was too hard to find and even harder to retain, and even cited struggles overcoming the language barrier. Of the 160,000 ha planned, eight years had passed, and they had only been able to obtain a 345 ha concession in Luang Namtha, a few smaller concessions in Sayaburi and Bokeo, and a contract farming agreement in Luang Prabang. The central level authorities involved in approving YSF's initial agreement played no role in facilitating land allocation at the lower levels of government, and Yunnan managers reported extensive foot dragging by the province and district officials. By 2012, the firm had recently given up on getting concession land and turned to contract farming as a way of at least getting more rubber planted, but villages were difficult to convince to join the company's concession and YSF leadership considered contract farming agreements a riskier investment for the firm than concessions (Interview, Luang Namtha, December 2012). Contract farming left the land under village ownership with few guarantees that the company could control plantation management and the production process.

Mr. Jia saved his strongest complaints for the multiple province level government offices YSF had to work with. Across the four provinces in which the firm was attempting to work, he discussed the differences in norms of conducting business and attributed this to divisions in Lao state leadership in each locale. He explained, for example, that he had heard from friends working for companies investing in Oudomxay that the province had younger, more forward thinking leaders than he encountered in Luang Namtha. The Oudomxay government had therefore been far more accommodating to his friend's company than Luang Namtha's provincial leaders had been with YSF. More importantly, the agreement to provide YSF with land was established between central leaders in Beijing and Vientiane but held little sway when YSF approached provincial leaders. Accustomed to being recognized in China as a state-backed company and enjoying strong state connections leading to other kinds of support, YSF expected their agreement with an institution in the Lao central state to lead to their rapid allocation of vast areas of land for investment.

In contrast, Lao state officials I interviewed in 2012 did not differentiate between YSF and other investors in the wave of Chinese companies they were expected to grant land to. If anything, the large amount of land officially granted to YSF – which completely outstripped the availability of land in those provinces – overwhelmed provincial officials. My research facilitator at the time, a staff member of the Provincial Office of Natural Resources and Environment in charge of monitoring land concessions, suggested that the firm's seeming lack of interest in building provincial level political relationships made provincial officials less inclined to facilitate the firm's access to land (Interview, Luang Namtha, December 2012). When I asked Mr. Jia whether his firm enjoyed any special treatment by the Lao government, he responded that they were treated as any other company, and that Lao state officials in the province just judged firms based on whether they operated "according to the contract," nothing more.

Being spread across multiple provinces also affected the company's investment progress. The firm had to establish relations with each provincial government anew,

supplier and thus sometimes establishes deals with purchasing companies a year in advance. As such, when I conducted this first round of interviews, many companies in Laos, especially YSF, had not yet been impacted by the global rubber price downturn.

creating costs and delays they hadn’t planned for. Once they obtained provincial approval, they still had to develop a relationship with the district and sometimes even negotiate with villagers for land. Years later, another YSF manager pointed out to me that obtaining land across so many different provinces might have been less of an issue as a private company (Interview, Luang Namtha, March 2017). This was due in part to the fact that many private firms gave “gifts” to state officials when seeking land, something he said was fairly common in his years working in Laos; as an SOE, however, YSF was not allowed to partake in “gift” giving. A number of private firms echoed the manager’s sentiment, remarking that an inability to engage in this practice set YSF apart from private firms in terms of their flexibility in operating in Laos. Other private firm managers described donations to village development funds, the purchase of elaborate gifts for local weddings and other celebrations, and sponsorship of state leaders’ children to study abroad in China as common practice – sometimes as standard business practices or general expected of them – all of which YSF leaders described as violations of firm policy as an SOE. This was one reason, they suggested, that YSF was particularly unsuccessful in obtaining access to land despite having ample capital and managerial capacity for expanding production beyond the small plots it was allocated.

The forms of support provided by the Chinese state do not always translate into tangible benefits or advantages to companies investing beyond its borders. Not only did YSF have the benefits of ORP support, but its investment agreement was negotiated at the central level as a major development cooperation initiative. But for a range of factors including the central-province divide and the early establishment of smallholder rubber, YSF was initially unable to take advantage of the support provided.

6.3.2 Forging Provincial State Relationships

I visited YSF three years later, in 2015, to find firm managers in a very different mood. The global price of rubber had bottomed out in 2011, affecting the Yunnan and Lao rubber sectors in late 2012. This was just before most trees planted in Laos had reached production age. Many Chinese investors delayed tapping but continued minimal plantation upkeep. A few allowed local farmers to tap their trees and keep all of the latex without providing the company with a cut. Lao farmers were tapping the rubber on their own land – some resigned to the slim profits earned as they lacked other livelihood options. Those independent smallholder farmers needed a factory to buy their latex. YSF’s factory was the only one operating in northern Laos at the time and therefore represented the only market channel available to Lao rubber producers.

When I met with Mr. Li, a different YSF manager, I brought up the company’s previous struggles to obtain land. “Labor is our biggest problem now, not land!” he replied throwing his hands in the air in exasperation. Since the global price drop, a number of other Chinese companies had approached YSF offering to sell their plantations but YSF had refused. Even on its small 345 ha concession nearby it was struggling to recruit reliable labor for tapping and it knew the situation was the same for other Chinese companies. “More land would only mean more problems” he stated. Instead, the firm was happy to focus now on processing which was proving far more reliable than growing rubber at current prices. Indeed, the lower price meant that while the income from rubber cultivation had dropped dramatically, processing still provided the firm steady if modest profits.

The fact that YSF could construct their factory so early spoke to their advantage as an SOE. The ORP had promised multiple forms of support to all firms, including facilitating access to capital. Access to low- or no-interest loans was explicitly mentioned by both central and province level policy documents on ORP implementation, cited as a benefit the policy would provide participating companies. After the ORP's establishment, the Yunnan Department of Commerce strongly and publicly encouraged provincial policy banks, which are responsible for supporting the Chinese state's economic policies, to extend loans to ORP companies. Sinosure, the national export and credit insurance company, was also encouraged to extend investment insurance policies to companies to facilitate their ability to qualify for loans. Interlocutors in the banking sector and at Sinosure recalled that their institutions were expected to actively support state initiatives like the ORP. That said, they admitted that few concrete mechanisms incentivized or enforced their provision of that support.

Meanwhile, the institutions providing these loans and financial services have their own business concerns and consider state-owned firms far more reliable clients than private firms. One interlocutor, an analyst responsible for assessing loan applications and designing described a stringent set of conditions she measured for ORP companies when they applied for loans and other forms of financial support for their investments in Laos. She had overseen the assessment of one of the most successful private companies investing in rubber in Laos, a company I knew had an extensive portfolio of investments in the telecommunications industry in Yunnan and whose plantations in Laos were thriving. Despite this, she had denied their application in the late 2000s based on the risk inherent in agricultural investments. She admitted that most ORP applicant companies did not qualify for loans because it was against bank policy to accept proof of land holdings in another country as collateral for loan applications. The bank's approach to providing loans for ORP companies was to identify the companies that would be least risky to lend to, in order to gain political recognition as supporting the policy while avoiding its exposure to loss. YSF, however, was a completely different case. "As an SOE they have the backing of the government" the manager explained, suggesting that the state would step in to help them in loan repayment before allowing them to default on loans. As a result, most banks were eager to lend to YSF as is true across the Chinese banking sector for SOEs (Gang et al. 2013; Chen et al. 2019). Therefore, although all ORP companies had improved access to subsidies and loans, YSF was granted far more financial support than others were.

As the only factory operating in Laos for years, the Luang Namtha provincial government turned to YSF for relief from the impacts of the price drop. In 2014, the market price for rubber translated to roughly 3,500 lak/kilo, down from a high of 12,000 lak/kilo in 2010. Rubber had surpassed tourism and logging as the primary economic activity in the province, and with the support of German development aid, the provincial government had established a rubber committee in 2013 with representatives of the provincial offices of the Ministries of Commerce, Planning and Investment, the Natural Resources and Environment, and Agriculture and Forestry (PAFO, 2013).

The committee approached YSF as well as two other companies which had more recently opened their own factories in Luang Namtha. Mr. Li recalled that the committee representatives requested that all three factories implement a price floor of 5,500 lak/kilo, appealing to the companies' stated goals of lifting the Lao people out of poverty and contributing to the country's economic development. Though the company and state representatives I interviewed were unaware of the exact terms of the negotiation over price floors, Vongvisouk and Dwyer (2016) interviewed provincial officials who asserted that the provincial government agreed to waive profit taxes for the companies that year in return. The other two companies with factories acquiesced to the establishment of a price floor but, according to Mr. Li, began processing only rubber from their own plantations, sending independent smallholders to YSF's factory instead. "They didn't do it because they would lose money," Mr. Li surmised, "but we represent the Chinese government, so we had to do it."

It remains unclear whether YSF's agreement with the Lao government to establish a price floor resulted in net losses or net gains for the firm. I could not confirm whether YSF received tax exemptions, and if so, how much those exemptions were worth. But after this price floor setting arrangement, I observed a shift in the way Lao state officials in the province referred to YSF in interviews. In 2012, none of my Lao state interlocutors noted the firm's status as an SOE, but by 2015 they were careful to explain to me the company's connections to the Chinese state and its commitment to development cooperation in Laos. A staff member from the Ministry of Commerce accompanied me on my visit to YSF, whereas I could visit other companies on my own. By 2017, state officials across other ministries also commented during interviews on the company's connection to the Chinese state and noted that this meant it had greater resources, a commitment to poverty alleviation and could be negotiated with in the name of development cooperation in ways other firms could not. In part by the accident of its earlier struggles to obtain land, but also because of YSF's greater ability to secure the resources needed to invest in more capital intensive assets like the factory, YSF had changed its relationship with the Lao state and secured its reputation as a reliable development partner.

6.3.3 New Approaches to Development Cooperation

YSF was steadily increasing its processing activities by the time I returned in 2017. The two private companies that had opened factories in Luang Namtha in the years after YSF faced increasing capital constraints because of low rubber prices and had a limited ability to purchase latex from producers in the area, and also had to hire labor on their own plantations, as a result. They also experienced difficulties accessing Chinese import quotas through the ORP. Chinese investors enjoy a number of advantages in their access to the Chinese market, most notably through the Opium Replacement Program (ORP) import quotas, to which all but one of the companies I studied had access. China consumes over 40% of the natural rubber traded on the world market and almost all of the rubber produced in Laos (World Bank 2016). Foreign rubber imports to China are taxed by the Chinese central government at a steep 37% based on their status as a strategic resource in China and the state's commitment to protecting its domestic production base. ORP import quotas permit companies to import a set amount of latex to China without having to pay the 37% import tax, thus giving participating Chinese companies privileged access to the Chinese rubber market. This has enabled Chinese investors to dominate rubber processing and export activities in Laos.

In 2017, YSF managers the same year shared that they were allocated quotas for exporting 5,000 tons of processed latex back to China – just under half of the total volume they planned to process that year. This was a considerable burden for them, as it would require them to either store the other half of their product in hopes of obtaining more quotas the next year or pay the 37% import tax. Still, the managers I interviewed admitted, it was far more than other firms had been granted (Interview, Luang Namtha, 8.2017). The allocation of quotas is based loosely on the total amount of produce a company has exported back to China in the past, which for YSF has become a considerable amount. Long before YSF plantations were productive, it was already collecting latex from independent smallholders, and by the mid-2010s I encountered producers are far south as Savannakhet (multiple days drive south) who were transporting their latex all the way to YSF factories in Sayaburi and Luang Namtha. This was despite their proximity to the robust Vietnamese rubber market just east of them by a few hours. YSF was sending collectors all over the country offering competitive prices for rubber despite the further distances it had to transport the collected latex. But its competitors complained bitterly to me that YSF was given far more quotas than other companies, not only based on its record of exports but also as a result of preferential treatment by the state officials granting quotas (Interview, Luang Namtha, August 2017).

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The growth of YSF's plantation and processing activities has been accompanied by the establishment of a new office in Laos. Whereas the Luang Namtha office had housed the firm's head managers for the first decade of its operations in the country, in 2015 they established an office specifically devoted to central state negotiation and development cooperation activities in Vientiane City, the capital of Laos. Ms. Yao is one of four Chinese staff in the comparatively small office and serves as both the office manager and the main translator for the company. She is in her mid-20s and arrived to our interview wearing a bright pink Lao *sinh* with a plastic frangipani flower – the national flower of Laos – perched slightly askew in her carefully constructed bun. She had just come from the National University of Laos where YSF was developing research partnerships with the Faculty of Forestry and the National Agriculture and Forestry Research Institute, and I realized she was the first Chinese company staff I had seen dressed in Lao traditional clothing. Instead of bristling at the differences in culture and lifestyle, Ms. Yao exuded a careful respect and interest in connecting her company's activities to the local context.

What generated even more enthusiasm in Ms. Yao was the company's plans to establish a rubber research center just outside of Vientiane City. YSF procured Chinese state funding under the new Belt and Road Initiative[88] and will contribute some of its own capital to establishing a 20m yuan (2.8m USD) building which the company plans to use as the future home of a laboratory for testing latex quality, a dormitory for Chinese workers who will provide trainings in rubber cultivation and management, an office, and a grand conference hall (Interview, Kunming, December 2017). Like many other meeting halls and centers built as a diplomatic gesture in Laos, the rubber research center is just over 17 kilometers away from Vientiane City – exactly the distance major international development agencies like the World Bank and United Nations use to determine whether per diems will be paid to government officials participating in meetings. When Chinese President Xi Jinping visited Laos in 2017, Ms. Yao shared excitedly that he listed YSF's rubber research center specifically in the Sino-Lao development cooperation package to which he committed. The center thus contributes to multiple actors' objectives: it will benefit YSF and actors across the Lao rubber sector by improving latex quality monitoring, while concretely displaying Chinese development aid to Laos.

Since the company's establishment in Laos in 2004, YSF has become far more adept at understanding and catering to the Lao state's varied interests. It has left behind its initial top-down approach reliant on state-to-state negotiations on its own behalf, instead establishing ties at multiple levels of government in Laos. It also tries to operate in ways that fit the different interests and priorities of actors at each of those levels. This new, targeted approach is having a marked impact on both the company's reputation in Laos and its ability to leverage its state ties for economic advantages. For example, YSF has begun to leverage its stronger relationship with the Lao government at both the province and central levels, as well as its strong ties to the Yunnan Provincial Government, to lobby the central Chinese state for an expansion of the ORP quota allocation. Whereas the quota for importing 5,000 tons of latex it received in 2017 was clearly insufficient to cover the 12,000 tons they processed that year, Ms. Yao and a manager I interviewed at the YSF headquarters in Kunming expect that the combined pressure from YSF, the Yunnan Provincial Government, and the Lao state will result in dramatically increased quota allocations to ORP companies by the Chinese central government. Lao central state officials and the head of the Lao Rubber Association (the former deputy head of the Ministry of Agriculture and Forestry) also happily proclaimed the benefits YSF's commitment to advocating for these quotas and impressed upon me the company's pivotal role as a bridge between the Lao rubber sector and the Chinese state.

It is increasingly difficult, therefore, to differentiate between YSF's commitment to enhancing Chinese development cooperation in Laos and its pursuit of its own business interests. During our 2015 interview, Mr. Li admitted that, "We are a business,

[88] Launched in 2013 by Chinese President Xi JinPing, the Belt and Road Initiative builds on the "Go Out Policy" providing a focus specifically on infrastructure projects in countries neighboring China in an effort to improve mobility and facilitate trade and exchange.

so of course we want to profit." But more importantly, he stressed, "we are trying to reduce opium and spur development in Laos, for the benefit of China, the world, and Laos itself." Though his statements were likely tailored to impress, the success of YSF to date is inseparable from its claims to being a development partner, and in turn its success in gaining Lao state support for its business endeavors has been inseparable from its claimed commitment to development cooperation.

6.4 Conclusions

Chinese firms are often believed to possess unfair market advantages as a result of Chinese state support (Moeller 2012), to act directly on behalf of Beijing's political interests, or to use particularly exploitative and undemocratic investment approaches to serve national interests above all others (Buckley 2013). But when firms move beyond the country's borders, they leave the state's jurisdiction and direct control. When investing in other countries, the Chinese state can neither support nor oversee firms in the same ways it does domestically. There is also considerable diversity across different forms of Chinese capital, and this diversity is further complicated when considering the diversity of host country contexts Chinese firms encounter as they invest abroad. Moreover, firms can be seen as contributing to national interests in a variety of ways, from simply representing China in a positive light to actively engaging in state-directed development cooperation initiatives or joining diplomatic activities. Firm leaders and managers overseeing operations on the ground must also navigate unfamiliar political contexts and the interests and demands of actors in host countries, which can pull them in directions not always aligned with Chinese state priorities. Nevertheless, Chinese firms are still expected to operate efficiently and to profit while also attending to these different interests.

Although YSF appears today to represent success in the Lao rubber sector, the company struggled for the first decade after it arrived. When I began my research in 2012, the company was floundering, and its managers were exasperated. Despite a high-level diplomatic agreement negotiated between the Lao government and Chinese state leaders in 2004 for YSF to establish its YNR branch and develop over 160,000 ha of rubber in northern Laos, by 2012 they had only obtained a meagre 345 ha of land and were drowning in debt. For all of its access to capital and preferential terms for import/export and purchasing activities as a state-owned enterprise (SOE), the company was slow to adapt to the considerably different business and governing environment it encountered in Laos. YSF also had to balance its business interests with the Chinese state's portrayal of Chinese rubber investments in Laos as a form of development cooperation. Meanwhile, many private Chinese enterprises obtained strong Lao state support and were planting thousands of hectares of concession land in the same province. YSF has therefore enjoyed advantages as an SOE, but it has also had to adapt its approach in order to capitalize on those advantages. It has had to simultaneously contribute to Chinese state interests, adapt to the Lao context, and also pursue profit. By 2019 it was playing a different (though still central) role in the Lao rubber sector from what it planned for when it first entered Laos. It has built its own political relationships with Lao state leaders, learned to navigate Lao state institutional relationships, and represents itself as a leading contributor to Chinese state goals of Sino-Lao development cooperation and diplomacy.

The previous two chapters explored Chinese companies' approaches to navigating land politics and the institutional regime governing foreign investment in Laos. In both chapters, I demonstrated that Chinese state support was a consequential factor shaping these companies' engagements in Laos but has not guaranteed their success in negotiating for land, weathering market fluctuations, or controlling latex production. In this chapter, I have argued that Chinese state firms are pulled between the need to develop profitable investments and attend to multiple state interests (in both China and the host country) to which they are bound. This case contributes to existing analyses of how Chinese state capital behaves when investing overseas, particularly those which use the pursuit of profit as an indicator of firm logics of accumulation (Lee, 2018). In understanding Chinese state capital as obligated to a more encompassing set of imperatives than profit maximization, as Lee suggests, the case of YSF shows that these imperatives can pull firms in multiple directions and firms must carefully navigate a network of different state actors as a result. I have documented YSF's approach to operating in Laos – an approach that I argue has differed from that of private Chinese rubber companies, and which has changed over time in response to market and regulatory challenges and the company's experience. My analysis focused on how the resources and benefits the firm has had access to as an SOE intersected with its competing responsibilities to different actors. I find that, at first, YSF struggled to leverage its ties to the Chinese state to generate market advantages and curry favor with state actors in Laos. Over time, however, YSF has gained a better understanding of the expectations and demands of different Lao state actors involved in governing foreign land investments, the Chinese state at multiple levels, and its own business interests, namely the need to accumulate capital. For YSF, the ability to link its operations with the interests of subnational state actors in both Yunnan and the provinces where it operates in northern Laos was particularly pivotal to its eventual success, as has its ability to differentiate itself from other Chinese rubber firms as not only a profit-driven business but a development partner loyally serving both Chinese and Lao state interests.

7 Conclusions: The Smell of Chinese Money

Figure 18. Above the Yunnan State Farms processing factory in Luang Namtha, Laos

The smell of rubber in northern Laos is synonymous with the influence of Chinese capital. As rubber dries and congeals, it gives off a smell I can only describe as a blend of rotting fish and burning tires. Once tapping and processing begin, that smell lingers in the thick tropical air wherever raw rubber is tapped, stored, or processed. There is a running joke in southern Yunnan that this is the smell of money.[89] When I asked my friend Zhanglin how her family in Xishuangbanna tolerates it, she responded laughingly, "It doesn't smell sweet but it's the smell of money!" The phrase has since been adapted into the Lao language as "hom ngern yuan" – the smell of Chinese money. Like the smell of tapped and drying latex, the influence of Chinese investment is detectable across the landscape.

In this dissertation I presented a grounded, transnational study of how rubber production has transformed trajectories of rural development and the relationship between state, society, and capital along the way. It traced rubber's reach from China over the Lao border, and described how the political, economic, and social characteristics of the crop translate into the Lao context consistently in some ways and with important incongruities in others. Despite massive changes to the Chinese economy, rubber continues to be categorized as a strategic resource and protected both domestically and now transnationally as Chinese rubber supply chains stretch across the border. This characterization has remained intact in its journey across the border. It has been eagerly taken up by actors across different institutions in the Lao state and by Chinese rubber investors alike who draw on the crop's history in China to envision and construct its future in Laos. Other aspects of Chinese rubber production, such as an emphasis on the large-scale plantation mode of production and the state protections and privileges the rubber sector and its companies enjoy in China's domestic economy, have not directly translated. Instead, Chinese investments in rubber production in Laos articulate with a history of fragmented, decentralized land governance and a different set of state territorial projects to which rubber is seen as strategic. This context of decentralized land governance has created more obstacles for Chinese investors than it has opportunities, as

[89] 钱的味道

well as openings for local state authorities and Lao rubber farmers to take advantage of Chinese capital in surprising ways.

This dissertation has argued that rubber has extended the territorial reach of both the Chinese and Lao states, but in very different ways in each country context. The importance of rubber to projects of state territorialization fuels a seemingly universal and totalizing constructions of rubber as a strategic resource and a silver bullet for rural development and establishing political stability in both countries' remote hinterlands. But the divergent ecological, political, and economic conditions between Yunnan and northern Laos has shaped rubber's territorial functions toward different outcomes for the rubber sector in each country.

I have further argued that the relationship between Chinese capital, as represented by Chinese rubber companies, and the Chinese state at different administrative levels changes as companies invest over the border but remains consequential. This remains true both domestically, where rubber is considered a strategic resource in changing but ever relevant ways, and even as Chinese investors move beyond the country's borders and therefore the state's direct control. The Chinese state-capital relationship is further complicated as Chinese investors are forced to contend with and adapt to the multi-leveled demands of the Lao state and the spatially uneven and layered history of land politics and resource governance in Laos. Whereas the role of Chinese rubber companies in China is that of producers of a strategic resource with a history of driving state territorialization in China's borderlands, the Lao state relates to Chinese rubber investors as foreign, non-state actors which it manipulates towards its own territorial ends.

I followed a political ecology approach through which I analyzed the biophysical, political, economic, and sociocultural characteristics of rubber as inseparable and dialectically linked. My results were based on two periods of 23 combined months of field work conducted between December 2013 and January 2018. I engaged a suite of qualitative methods including conducting over 90 in-depth interviews in Mandarin, English, and Lao, visiting and conducting interviews in over 40 rubber producing villages on both sides of the Sino-Lao border, and mapping access mechanisms and power relations along the rubber supply chain. My findings enhance critical social science understandings of how foreign investors encounter land politics and reshape development logics, particularly in post-socialist countries like China and Laos. They also contribute to studies of global land grabs and the growing literature on the environmental and development impacts of China's global integration under the banner of the "Belt and Road Initiative" as it is playing out in Southeast Asia.

7.1 Main Findings

Rubber has been fetishized by the Chinese state as a mechanism of state territorialization and development. It is credited in Chinese state narratives with transforming unruly jungles, shifting cultivation fallows, and opium fields into organized plantation rows, and with disciplining labor and civilizing the ethnic minority groups of the uplands of the Sino-Lao borderlands. Rubber's promotion in China evolved from a strategy for establishing a domestic supply of a strategic resource and extending state power in the borderlands, to one for driving state revenue generation through commercial cash crop cultivation. I found that the ways in which rubber is configured by the Chinese state as strategic have changed since its establishment in the 1950s, in parallel with China's transition from a state-led to a market-based economy through the 1980s Reform and Opening era. In this current moment of China's global expansion since the 2000s, rubber continues to be considered strategic to Chinese national interests but in different ways. Rubber expansion became less important as a territorial project and the role of State Farms workers as drivers of development and political integration in the borderlands is obsolete but securing access to a steady supply of rubber remains important to the Chinese state.

When the Chinese state began to encourage companies to expand rubber production into Laos in the 2000s, its policies and promotional rhetoric were both couched in narratives of rubber as a tool for development cooperation – namely for helping China's economically underdeveloped neighbors in Laos and Myanmar out of the trap of opium cultivation and along China's path toward development. As rubber production traveled across the border into Laos, the narratives of its role in driving economic development traveled with it but the political economy of rubber production that emerged in Laos was quite different from that in China. Chinese state and private sector proponents of the crop proposed establishing large-scale rubber plantations in Laos with heavy state support as a pathway toward the same types of political and economic transformations which the Chinese state prides itself on enacting across southern Yunnan. To demonstrate this, I analyzed the design and implementation of the Opium Replacement Program (ORP), which established incentives for Chinese investments in cash crop alternatives to opium in Laos and catalyzed the boom in Chinese rubber investments. I concluded that the ORP was shaped by both central state ideals of securing the Sino-Lao borderlands against the opium trade and Yunnan provincial state and private sector interests in cross-border trade and investment with Laos.

In Laos, however, rubber production has expanded in a different form. It was initiated by Lao farmers, largely those returning as refugees from or with family ties to China in the 1990s. As in China, the introduction of rubber was supported by the Lao state and used as a tool for extending territorial control in some of the more remote, less definitively state controlled spaces. Chinese companies followed closely on the heels of these smallholder rubber pioneers and invested in rubber in Laos with considerable support from the Chinese government through the ORP. Contrary to fears of a Chinese takeover, however, Chinese investment has entered and transformed northern Laos – largely on terms dictated by Lao actors. I showed that Chinese state and private sector actors alike envisioned rubber as a large-scale plantation crop, in part due to the work it did for projects of state territorialization in the Yunnan borderlands. While rubber also serves the territorial designs of the Lao state like it did in Yunnan, the plantation mode of investment was far less successful there. I argued that this was in part because, in some cases, actors across the fragmented, decentralized Lao state have been able to use Chinese investment to advance their own territorial agendas without necessarily providing those investors with land. As a result, obtaining land for investment was a challenging and slow process for Chinese investors. I find, furthermore, that though Lao state actors initially competed with each other to attract Chinese capital, they were then slow and careful in the process of actually facilitating the allocation of land to investors. Because of this, I have shown, Chinese investors were granted far more land in their initial contracts than they were actually allocated in practice, with major implications for their plans for the scale and nature of their rubber operations in Laos.

Challenges continued for Chinese investors into the tapping phase. I examined the implications of the specific spatio-temporal progression through which rubber expanded in northern Laos – with Lao smallholders establishing rubber first in the 1990s and Chinese rubber companies following in the mid-2000s. For a number of intertwined reasons explored, northern Laos has become a mosaic landscape of different types of rubber ownership, with most companies owning a multitude of small, dispersed plots of rubber. I found that this forced Chinese firms into more collaborative and flexible market arrangements with Lao producers than they initially sought. Chinese investors exert especially uneven and highly contingent leverage in negotiating over labor and latex collection. They have resorted to creative forms of surveillance as well as outright intimidation in order to exert spatial control over their holdings, but have enjoyed little Lao state support for enforcing formal contracts with local land users, contract farmers and workers.

Finally, come full circle back to the importance of Yunnan Natural Rubber, the Lao branch of Yunnan State Farms (YSF), but as it has established its operations in a new context in Laos. YSF stands out among Chinese rubber investors and the story of its initial failures and eventual rise to influence reveal much about the relationship between Chinese capital and the Lao and Chinese states. I demonstrate how YSF – a provincial level state-owned enterprise and the most influential Chinese rubber investor in Laos – failed initially to engage Lao state support despite a high level diplomatic agreement granting it 160,000 ha of land. After its initial failures, YSF managers shifted their approach, developing a number of strategies for currying favor with the Lao state in order to secure a place of privilege in the Lao rubber sector. The company eventually gained considerable market advantages by positioning itself (with mixed success) as an emblematic development partner. YSF's process of learning and repositioning itself demonstrates the ways in which Chinese firms must find synergies between firm interests and those of various state actors in both countries.

7.2 Contributions to the Literature

This dissertation makes three contributions to the broader literatures on China's global integration and large-scale land grabs. First, following a political ecology approach, I treat the biophysical, political, economic, and sociocultural characteristics of rubber as inseparable and dialectically linked. I analyze rubber as both a globalized market commodity and a political symbol first built into Chinese visions of modernity, economic development, and progress. Through Chinese investment, rubber has been translated and thus transmuted into Lao landscapes and discourses of upland development and opium eradication. I thus show that the particular materialities of rubber (*Hevea brasiliensis*) have articulated with histories of state land and resource governance and ongoing projects of state territorialization in both China and Laos and those projects have, in turn, shaped the rubber sectors in both countries.

Second, drawing on theorizations of state territorialization, I showed that foreign land investments in Laos have not eroded state sovereignty as some global land grabs scholars have suggested, but have instead helped extend state territorial control. This contradicts depictions of the Lao state as weak and of Chinese capital as entering Laos, obtaining land, and extracting profits unhindered. It indicates the importance of host country state structures and histories of land governance. My findings thus emphasize the need to understand transnational land investments not as mere market transactions but as new forms of encounters between market and political forces, embedded into existing structures of power and contingent upon histories of territorial control and state formation. Importantly, these structures of power on both sides of the Sino-Lao border often include divisions between provincial and central state interests – divisions which further shape how rubber and Chinese investment have been used as tools for state territorialization.

Finally, I follow conceptualizations of China's growing engagements in development and investment activities across the world as a matter of reflexive and contingent integration rather than a unilateral assertion – not the assertion of Chinese dominance but rather a process of China's global integration. To this literature on China's global integration, I contribute a grounded view of how this process draws Chinese actors into complex negotiations and collaborations with different actors in the Chinese and host country state, as well as with the communities of agricultural producers and land users where they seek to invest. I show that Chinese investors and state actors alike frequently try to transplant rubber as it has been cultivated in China into new contexts in Laos without attending to the divergent ecological, political, and economic conditions between the two places. I document the mixed results of this approach, which is based on an assumption of Chinese domestic experiences with development as a model of success that will translate globally. I also show that Chinese state support for investors is consequential for how they invest and adapt to the Lao context, but that this support is limited in the degree to which it shelters them from both market and political challenges they face in Laos. These findings suggest the value of such fine-grained, detailed documentation of interactions between individual Chinese and Lao actors in the rubber sector as the basis for unravelling the multiple drivers and dynamics shaping the rise of this transnational rubber sector.

7.3 Grounding China's Global Integration

In my analysis, I present a perspective on China's global integration largely absent from the existing literature on Chinese overseas land investments. Whereas Chinese capital is often treated as a faceless force expanding across the globe unhindered, I ground this category of capital in specific actors and present it as embodied, complex, and evolving through its transnational engagements. My analysis centers the beliefs, experiences, and decisions of Chinese rubber investors in Laos as a way of understanding the implications of rising Chinese investments in land and resource extraction for host country sovereignty, landscape change, and local livelihoods. The perspective provided by Chinese rubber investors is particularly revealing of the micro-processes underlying the larger political and economic shifts that China's global integration entails because they are positioned at the nexus of multiple processes of change.

The Chinese state has long exercised considerable control over its domestic economy and both state and private enterprises as a result. However, as Chinese enterprises invest in land overseas their relationship with the Chinese state shifts and must be renegotiated. Investors also act as the primary points of contact for many actors in Laos, from state officials to rubber farmers, with a new and rapidly globalizing China. While the degree to which they can be seen as representing 'China' is of course limited, they do draw on Chinese state discourses of development cooperation to frame and justify their investments and they apply learned political logics around resource management and development progress from China to new contexts in Laos. On the ground where Chinese companies invest, these discourses and logics are taken up, often strategically to fit Lao actors' own specific interests and historically precedented approaches, but with nevertheless transformative effects on landscapes and livelihoods.

Chinese overseas land investments are often depicted as operating either completely distinctly from other modes of global capital or as the latest in a long history of colonial resource extractors. This dissertation contributes to the construction of a far more complicated and multi-faceted depiction of China's global integration – a depiction with ample room to consider a much wider range of agency for various actors, and a wider range of possibilities for class solidarity in response to what are perceived as "land grabs." I show Chinese capital as simultaneously linked to the Chinese state and able to act independently, to weather changing market conditions, and to navigate and adapt to a political context in Laos that differs dramatically from that of China and has changed continuously since investments were established. I also document the ways in which some characteristics of rubber production in China – its discursive productions, material practices, and political economic structures – have been transplanted directly into Laos whereas others have been repurposed or left behind. This dissertation therefore shatters popular international narratives that characterize both the land grabs phenomenon and China's global integration as unidirectional insertions of transnational capital interests on weak or corrupt host countries across the global south.

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8 Appendix I. Methods

In this dissertation I engage a mixture of qualitative methods rooted in a political ecology approach to study the investment of Chinese capital in the expansion of rubber from Yunnan to northern Laos. Chinese rubber investors who poured into Laos in the 2000s were my primary research subjects. I sought to understand what drove them into Laos, how they navigated the task of seeking land and operating their cross-border rubber businesses, and how they shaped the development of the Lao rubber sector. Due to the continued categorization of rubber as a strategic resource in China and the strong role the Chinese state plays in directing economic activity domestically, I expected the Chinese state to play a central role in driving Chinese firms across the border, shaping the ways they established their plantations, and structuring production relations between Chinese firms and Lao land holders, farmers, and workers across the Lao rubber sector. I therefore examined Chinese state policies and the provision of support under the Opium Replacement Program and other channels of regulatory influence. I also documented the perspectives, practices, and grounded experiences of Chinese rubber investors and their varied encounters on the ground in Laos. This revealed that Lao state interests at multiple levels, local histories of land governance that varied across space, preexisting systems of agricultural production and land access, and a range of other factors beyond the Chinese state also played important roles in shaping the way Chinese rubber investments unfolded.

In order to understand what factors motivated Chinese companies to invest beyond the border, I turned to the Chinese policies that pushed them to go out, the Lao policies that attracted them to Laos, and the market conditions that shaped their considerations of risk and opportunity. I analyzed the design and implementation of policies and regulations in both countries, not only at the time of the rubber boom but leading up to it. I did so by examining relevant policy directives and interviewing state officials involved in their establishment or responsible for interpreting and carrying them out. This included policies that directly affected Chinese cross-border investments and the rubber sector specifically, as well as to broader regulatory shifts that created the conditions of possibility and higher level political justifications for facilitating their activities. For a deeper understanding of the regulatory context and drivers of investment, I interviewed policymakers and planners in the Chinese and Lao states at multiple levels as well as sector experts and researchers to gauge the importance and impacts of these policies and their role in shaping the expansion of rubber into Laos. I then conducted interviews with 24 Chinese companies during which I inquired about the factors – political, market, and other – that shaped their decision to invest, their expectations when they first set out, and the specific channels through which they carried out their investment activities.

I also studied the development of rubber production in Yunnan, both to understand the timing and nature of the push to expand rubber into Laos and to document the basic political economy of rubber production for comparison across the countries. I reviewed literature and secondary materials on Yunnan's rubber sector through history, and interviewed a range of actors in the sector including a number of researchers at different institutions (including the state sponsored Tropical Crops Research Institute, China Agriculture University, and multiple universities and research centers in Yunnan), state officials, and private sector actors. I also spent time in two rubber producing localities: one village of Hani independent smallholder rubber farmers and one State Farms branch to understand household level participation in rubber production and the way rubber has structured livelihoods and patterns of rural development in the region. I then followed the supply chains from those villages, interviewing multiple latex collectors, processing factory managers, and a broker who managed sales between Yunnan latex suppliers and manufacturers of rubber goods from outside the province. This provided me with a broad picture of the pressures to expand China's rubber production that different actors within the sector were experiencing and to map out who stood to benefit and how. I also gained familiarity with standards and norms in the Chinese rubber sector, including compensation for tapping wage labor and basic management of rubber trees (seed germination, planting, and management), which I compared to those I observed in Laos.

Next, I sought to analyze the ways Chinese investors navigated the tasks of seeking land and establishing their rubber plantation operations in Laos. I initially assumed that investors' demands and expectations drove negotiation processes. I also expected that formal legal regulations on both sides of the border would structure these negotiations. I therefore set out to develop profiles on a variety of companies, documenting their initial negotiations for land in the 2000s, how their plantations were established, and operating by the time of my field work. I structured my inquiries around a political economy approach, documenting the policies and market signals they were affected by and inquiring about what factors mediated their access to land, labor, and capital or markets. I collected legal documents on land deals, labor arrangements, and records of capital investment and any trade and exchange. I also triangulated interviews on each of these company investments with company managers, local land users, laborers, and state officials involved at any point in the company's development in Laos. Triangulating the perspectives of state, company, and local community actors was especially important because, contrary to my initial hypothesis, the arrangements under which each company established rubber varied widely. Each arrangement proved to be highly contingent not on a standardized set of formal regulations or company characteristics, but on a complex mixture of local factors only understood by comparing multiple perspectives of those directly involved.

Finally, I examined the role Chinese rubber investments have played in the development of the Lao rubber sector. My objective was to understand the political economy of rubber at different scales, and to understand the power relations between Chinese companies and other actors in the Lao rubber sector. In three provinces in northern Laos, I conducted interviews with a range of actors with different involvements in the sector: Lao state actors at the district and province level, latex collectors, processing factory managers, managers of rubber companies including both Chinese and non-Chinese (two Lao, one Lao-Chinese joint venture, one Vietnamese, and one Thai-Chinese joint venture) companies, labor recruiters, wage laborers, plantation supervisors, village authorities and rubber farmers. At the village level, I consulted villages directly impacted by Chinese rubber plantations, as well as those producing rubber independently. Across these interviews, I inquired about the terms through which each set of actors engaged in rubber production, processing, and trade. I asked what mediated their access to land, labor, capital and markets under different conditions, and about their interactions with each other set of actors along the rubber supply chain.

Across all aspects of my data collection, I focused on to how the historical foundations, the cultural politics, and the dialectical relationship between people and resources all structure conflicts surrounding land use and resource extraction. A key consideration in my data analysis involved differentiating between discourses and imaginaries around rubber, and on the grounded practices of rubber establishment, cultivation, and trade. I have taken particular caution in analyzing dominant discourses, or what Walker (1999) refers to as the myths or fantasies of the periphery held by and strategically produced for the center. When I encountered, for example, discourses of rubber as a tool for poverty alleviation, for opium eradication, or for stabilizing shifting cultivation, I assessed these discourses not for their truth or accuracy, and not as linked to rubber investments in a causal or linear fashion. Instead, I examined them as indicative of the mechanisms and logics of state territorial control that work through rubber, and I documented what actors engaged these discourses, in what contexts, and to what ends, as a way of better understanding the links between rubber and state territorialization. In the following sections, I describe my data collection and analysis in more precise detail before reflecting upon the way my research partnerships and positionality shaped this work.

8.1 Data Collection

I utilize a mixture of data sources, including semi-structured interviews as well as secondary sources. As stated in Chapter 1, I conducted over 90 interviews during 9 combined months of preliminary fieldwork from 2014-2016 as well as 14 months of field work between October 2016-January 2016. I also draw on research conducted and published before my doctoral studies when I worked as a research assistant in 2012-2013 for the Centre for Development and Environment in Vientiane, Laos. I interviewed Chinese and Lao state officials, Chinese and Lao company managers and investors, Lao rubber farmers, workers on rubber plantations, village authorities, and key informants including experts and researchers in development aid, agriculture, and land investments. During my time in the field I also observed meetings and events on relevant topics. I took handwritten notes on my conversations, interactions, and observations. A select number of interviews were recorded, with permission from the interviewee who was also informed of the full anonymity with which I would threat their remarks during the interview. Recordings were used when an interviewee spoke Mandarin in a heavy accent with which I was unfamiliar, and thus allowed me to review their comments and check for accuracy against my written notes. I also collected policy documents and official state orders, legal contracts on land deals, sector brochures, and statistics (e.g. on the Opium Replacement Program, foreign land investments in Laos, and rubber cultivation) which were publicly available in China and Laos.

For I used a snowball sampling approach, which Weiss (1994) defines as being introduced to new research subjects through existing subjects or contacts instead of through random sampling. I took this approach because much of my research was dependent on getting access to company and state decision-makers and influential actors and establishing rapport with them. In this sense, previous connections and rapport with research subjects served to strengthen the quality of my interview data. By working through existing relationships with research communities in each country, I was also able to discern before interviews what potential sensitivities and vulnerabilities my interlocutors might possess and to adjust important phrasing in the way I posed questions and structured my interview approach accordingly.

My snowball sampling in China radiated out of this established network centered on the Kunming Institute of Botany (KIB), and I established a number of contacts by participating in the October 2016 “Sustainable Rubber Conference” co-hosted in MengLong, Xishuangbanna, by my colleagues at KIB and the Xishuangbanna Tropical Botanical Garden. In addition, I began the company-level portion of my project in Kunming by interviewing top managers and public relations representatives of the companies I would later interview in Laos. Chinese companies investing in Laos and Myanmar are generally required to establish headquarters in Yunnan, which I contacted through former KIB colleagues and interviewees. I also made periodic visits to the Tropical Crops Research Institute (TCRI) in Jinghong, Xishuangbanna Region, Yunnan Province. The TCRI is Yunnan’s primary state-funded rubber research center that sets cultivation and management standards for domestic large-scale Chinese rubber plantations. Through the TCRI I was able to consult relevant agricultural scientists and interview research experts in the Yunnan rubber sector.

In Laos, I also began my field work by interviewing key informants in Vientiane and provincial capitals – many of whom were introduced to me by contacts at the Centre for Development and Environment and my other official research sponsors (see below). In contrast, when collecting data on the 18 Chinese rubber deals I focus much of my analysis in Chapters 4 and 5 on, I made an effort to include companies across a number of categories and reached many interlocutors through ‘cold contacts’ – relying on state officials in the province sending a letter or making a phone call to them asking that they meet with me for an interview. In selecting the provinces where I sought permission to work, I was careful to consider the pool of companies operating in those provinces and their characteristics. For example, as the only operating state-owned enterprise, including Yunnan Natural Rubber, the Lao branch of Yunnan State Farms, was a priority of mine and I visited its plantation sites in two different provinces – Luang Namtha and Luang Prabang – and also traveled to southern Laos to interview representatives at a factory I had been told they were sourcing from. I also made an effort to include companies with both contract farming and concession agreements.

That said, my study site selection was ultimately determined by where my research partners were able to provide me access. I still specifically prioritized seeking access to provinces other than Luang Namtha when I communicated my interests to partners, but some provinces, including Bokeo where I was particularly interested in conducting field research, were simply not in the sphere of my partners’ access. At the forefront of considerations in my province selection was the fact that the vast majority of research conducted on Chinese rubber investments in Laos has been focused on Luang Namtha Province. Luang Namtha was the first province to host smallholder and later Chinese investments in rubber, but my review of the available literature on other provinces and my preliminary field visits suggested that Luang Namtha’s history and resultant current day rubber economy were different in many ways from that of other provinces. As a result, I set out to study rubber in multiple provinces and ended up working in Oudomxay, Luang Prabang, and Luang Namtha, primarily selected because these were the provinces I could gain access to through partnerships but also because they included a mixture of contract farming and concession investments.

Whereas key informant interviews were structured around the particular expertise of that interlocutor, my interviews in these three provinces were semi-structured, based on interview instruments I designed, tested in early interviews, and tried to stick as closely as possible to. In these provinces, interviews were conducted with a range of actors in the rubber sector (primarily including Chinese company managers, independent smallholders, contract farmers, hired latex tappers, collectors, Chinese and Lao factory staff, formal and informal exporters of latex, and Lao and Chinese state officials). In each district where I obtained permission to work, I visited between one and three villages engaged with any Chinese rubber company I profiled, as well as two villages doing contract farming and at least two villages doing smallholder rubber. In interviews, I asked about land, labor, and latex marketing arrangements to ascertain who benefits from rubber production, how, and under what conditions. My aim was to assess relations of production and mechanisms of accumulation across the range of rubber production arrangements active in northern Laos – independent smallholdings, concessions, and contract farming of various forms – and to examine how latex and its associated economic benefits flows through emerging networks of plantation owners, rubber tree tappers, latex collectors, processing factories, and exporters.

In China, not needing the help of a translator to communicate, I worked with considerably greater freedom than in Laos as I collected data through a number of informal means and personal connections. While I did conduct a number of interviews with policymakers who were introduced to me through colleagues at KIB, I also made chance the connections through personal acquaintances and other scholars.

8.2 Data Analysis

I used the qualitative data analysis software MaxQDA to organize and analyze my interview data. I used the MaxQDA coding tools primarily to conduct the data analysis included in Chapters 4 and 5. I included the interviews of Lao state officials, villagers, and company representatives used to document and compare the 24 total Chinese rubber company investments I was able to collect some data on. I excluded 6 of those companies from the analysis for lack of sufficient data based on a baseline for inclusion in my analysis as companies for whom I had: a) at least one interview with a company representative, b) a visit and interview with the village authorities of at least one village where the company operated, and c) at least three government interviews with state officials involved in or knowledgeable of the investment, at least one of which was at the district level, d) data from at least 3 sources on the company's granted and allocated land in order to allow for triangulation. I then created a master spreadsheet documenting key characteristics for each company and village where I conducted interviews, including areas of rubber planted, types of arrangements present (smallholder, contract farming, concession), Lao state offices and ministries most involved, key dates, labor and market connections (e.g. what factory or company villagers sold to), and whether any conflicts had arisen over land, labor, or latex collection. This helped me identify broader trends, such as the gap between granted and allocated areas, the prevalence of contract farming despite the dearth of research on it in Laos, the pivotal role of district level authorities, and the frequency with which smallholder rubber predated company investments.

In order to code these interviews, I first took notes on common themes that emerged during field work, and returned to consider these as I translated, transcribed, and inputted interviews into MaxQDA. Important themes that emerged I in turn used to code my interviews centered on narratives I was interested in and portrayals of relationships between the interlocutor and other actors of interest. Narratives included “progress and development,” “nationalism and exceptionalism,” “profit and business interests,” and “state interests.” Once I had coded interviews for these narratives, I compared which actors mentioned them and what activities and interventions they associated them with to gain a sense of how different actors rationalized business and policy decisions and characterized rubber cultivation more broadly. This also helped me trace how intersecting discourses of development, territory, and rubber circulated in both China and Laos.

I also coded interlocutors’ descriptions of their relationship with other actors. I reviewed interview texts using five codes: Company-Village Relations, Company-Lao State Relations, Company-Chinese State Relations, China-Lao State Relations, and Village-Lao State Relations. By pulling out certain codes for a certain category of actor, I was able to make observations as to the state-company-society relations characterizing rubber deals. For example, when I compared Chinese company representatives’ comments on the relationship between their firm and the Lao state, there was a universal expectation that the Lao state should support their business activities, and that their investments were synergistic with state development and governance objectives in Laos. There was also a near universal disappointment in the Lao state’s support for them, particularly in procuring land and labor and enforcing contracts.

Finally, I attempted to systematically collect data on areas granted, allocated and planted, on latex price and the cost of inputs and key activities along the rubber commodity chain. These qualitative measures were, however, so variable across actors reporting them or dependent upon context and timing (e.g. latex prices varied wildly even from month to month, and farm gate prices for latex collection depended on village or plantation location) that I considered qualitative analyses of them to be unreliable. For data collected in rubber planting areas, I relied on comparing areas reported in interviews with the Lao State Land Leases and Concessions Inventory as a way of checking and adjusting their accuracy. I had the reported Inventory areas before I began to conduct interviews, so I was able to ask interlocutors to explain differences that arose, which allowed me to at least understand which figures were likely inflated, which were under-reported, and why. As a result, I only present a comprehensive table of area figures as an appendix to Chapter 4. I focus my analysis on the relationship between granted and allocated areas instead of their absolute figures, and limit the cases presented in detail in the text to those in which I am sufficiently confident in the absolute areas discussed based on the quantity and quality of sources I was able to consult.

8.3 Partnerships, and Research Permissions

As in most countries, conducting research as a foreigner in both China and Laos required obtaining certain research permissions. In China, I was based out of the Kunming Institute of Botany (KIB), a branch of the China Academy of Sciences and the institutional host of my former employer from 2009-2011, the World Agroforestry Centre in Kunming. KIB is located in Kunming, the capital of Yunnan, and my former supervisor, Dr. Xu Jianchu (KIB senior scientist) heads two rubber research projects funded by the Yunnan government through which I interviewed key state and rubber sector contacts. I also obtained a research visa through sponsorship by KIB.

In Laos, I was sponsored by the National University of Laos for an education visa, but the processing time exceeded the duration of my field work, forcing me to carry the receipt of application in case asked. I was based out of the Vientiane office of my former employer, CDE and gained research permission to visit Luang Prabang and Oudomxay through existing CDE projects in the two provinces (The Agrobiodiversity Initiative in Luang Prabang and the Leases and Concessions Inventory in Oudomxay). In Luang Namtha, my first field visit (Feb-Mar 2017) was sponsored first by the National University of Laos Faculty of Forestry (supported by the University of Bern, Switzerland) and my second visit (Aug-Sept 2017) by the Deutche Gesellschaft für Internationale Zusammenarbeit (GIZ), a German development agency. In both countries, my sponsoring institutions provided me stamped official invitation letters, with English versions and Chinese and Lao versions depending on the country, which I presented to interlocutors if asked for official documentation.

8.4 Positionality

My national and ethnic identity, gender, and professional connections mediated my access and the ways my interlocutors perceived and received me, and my research aims. I had already lived in, conducted previous field research, and traveled fairly extensively throughout China and Laos in the five years prior to the start of my doctoral studies. This experience greatly shaped my ability to reflect upon, prepare for, and navigate the impacts of my identity as an American academic, a Mandarin speaking Chinese-American, and a woman on my experience conducting research in the field. While aware of many moments in which parts of my identity determined and strongly structured interactions, I believe I benefited from a few attributes that lent me some fluidity in how I was perceived. Being half Chinese, for example, meant that I could emphasize my connections to China more than a white researcher with the same language skills and work experience in China might.

Age and marital status are also important factors in how anyone, but particularly women, are perceived in both China and Laos. For reasons of personal safety and because I felt it helped me maintain professional boundaries, particularly when traveling and conducting interviews alone or with male interlocutors, I wore a ring on my left ring finger and claimed to be married when asked. While conducting research prior to the start of my doctoral studies, I found that questions of my marital status often derailed interviews and sought to avoid this. And whereas Janet Sturgeon (2013) found that her age (in her late forties when she conducted her doctoral research in southwest China and northeast Thailand) lent her credibility and respect in the field, I believe I benefited in other ways based on my age (30-31 during my primary field work period). In contrast to taking Sturgeon seriously based on her age, she notes that her research assistants who were closer to my age were perceived by interlocutors as non-threatening, and I believe I too was perceived as less threatening or connected to authority figures than older or male researchers might be. I felt this in particular during interviews with Chinese company representatives – almost all of whom were men who often presented their work in Laos as adventurous, and their surroundings as wild frontier landscapes. I found their responses shifted from short to effusive when I suggested naivete on my part or phrased interview questions to include mild flattery (e.g. instead of asking, "why did your company sign a concession contract instead of a contract farming agreement", I might ask, "how were you so successful in getting a concession contract where other companies have only gotten contract farming agreements?").

In China, most of my interlocutors referred to me as foreign initially. As our interactions progressed, however, my ability to speak Mandarin relatively fluently (though with an accent and limitations of comprehension in professional contexts outside my areas of familiarity) and my experience living and working in China tended to replace the primacy of my foreignness. This emphasis on my connection to KIB as the core of my identity as a researcher was enhanced because I gained access to most key informants through introductions from colleagues at KIB. I could also describe my research interests as rooted in the years I worked for KIB, emphasizing therefore that my time in China stretched back to 2009 when I first moved to Yunnan. In Laos, perceptions of me by interlocutors were similarly filtered through my language skills and professional connections. I speak only basic Lao, enough to introduce myself and my research topic but not enough to conduct interviews. Because I spoke English and Mandarin but not Lao, my Lao interlocutors tended to regard me as Chinese or as an American with a Chinese father – a phrase they often repeated with curiosity or used to introduce me to others. As such, I relied on hired translators who, following common formalities in Laos, included their own professional affiliations when they introduced themselves. Two of my translators were based at the National University of Laos, one at the Ministry of Natural Resources and Environment, and one with the GIZ, my facilitating partner for one visit to Luang Namtha. I believe their affiliations added a layer to perceptions of me as a researcher – a layer which might lend creditability in some contexts or have created barriers in others in ways beyond my control and ability to fully assess but are nevertheless important to acknowledge.